(44)

8-1512

ACCESS DB # 100345

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Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: FLLI PESELEL Examiner # : 62213 Date: 3/31/06

Art Unit: 1623 Phone Number: 2-0659 Serial Number: 10/806,065

Location (Bldg/Room#): REM 5C18 (Mailbox #): _____ Results Format Preferred (circle): PAPER DISK

****

SA/S

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: _____

Inventors (please provide full names): _____

_____

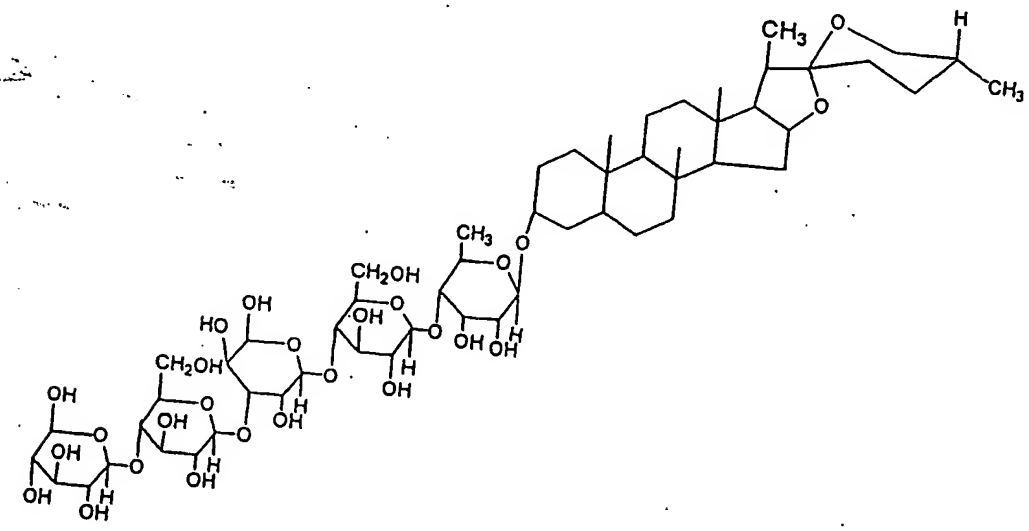
Earliest Priority Date: _____

Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

For Sequence Searches Only ***Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*** please do structure search

1. (Currently Amended) Tigogenin pentaglycoside of formula ~~I~~ 1 isolated from aerial parts of *Chlorophytum nimonii*



SERIAL NUMBER	FILING OR 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
10/806,065	03/22/2004 RULE	514	1623	U 015093-6

APPLICANTS

Lakshmi Vijay, Lucknow, INDIA;

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FILE 'REGISTRY' ENTERED AT 13:22:33 ON 07 SEP 2006

=> d his

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L1             1 S US20050209168/PN
                 SEL RN

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L2             4 S E1-E4
L3             1 S 864969-11-9/RN

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L6             2 S L5
L7               STR L5
L8               STR L7
L9             0 S L8
L10         3492 S 9991.6.1/RID
L11       589626 S 46.157.1/RID
L12         1357 S L10 AND L11
L13         9039 S 5/RID.CNT (T) 46.157.1/RID
L14          134 S L10 AND L13
L15            1 S L14 AND L2

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L19              STR L5
L20            7 S L19
L21          146 S L19 FUL
L22            0 S L8 SAM  SUB=L21
L23            0 S L8 FUL  SUB=L21
                 SAV L21 PES065/A
L24            1 S L21 AND L2

     FILE 'HCAPLUS' ENTERED AT 12:54:10 ON 07 SEP 2006
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L27           46 S L26(L)THU/RL
L28           46 S L25 OR L27


=> d que l23
L8               STR
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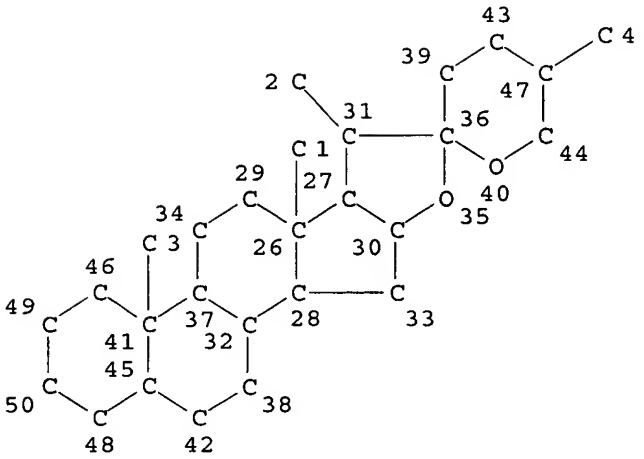

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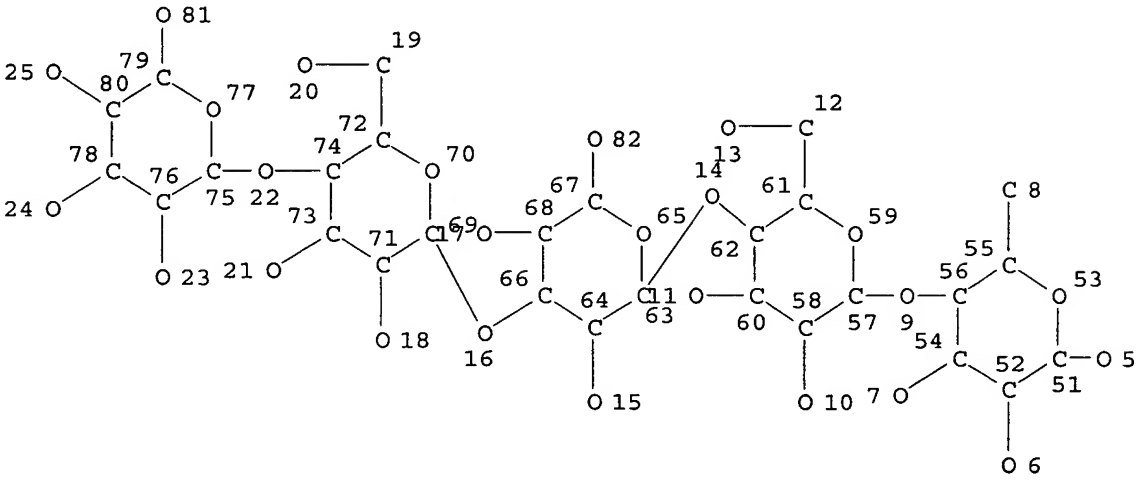

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Page 2-B
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

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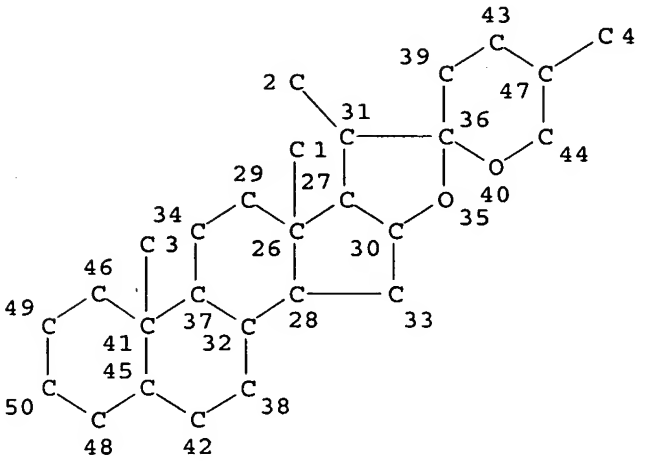
STEREO ATTRIBUTES: NONE
L19 STR



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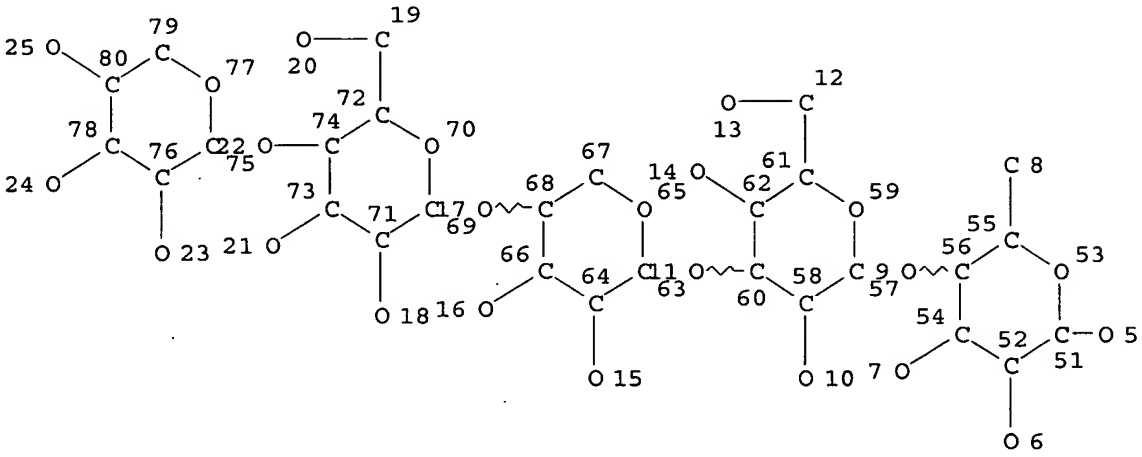

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Page 2-B
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DEFAULT ECLEVEL IS LIMITED

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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 80

STEREO ATTRIBUTES: NONE
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L23 0 SEA FILE=REGISTRY SUB=L21 SSS FUL L8

=> d que L28

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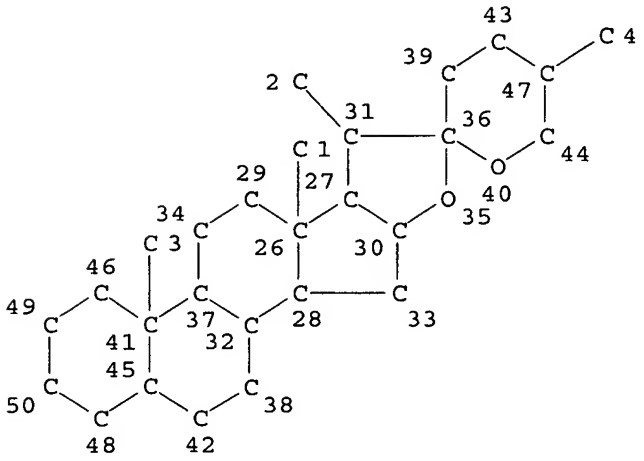
71-36-3/BI OR 864969-11-9/BI)

L19 STR



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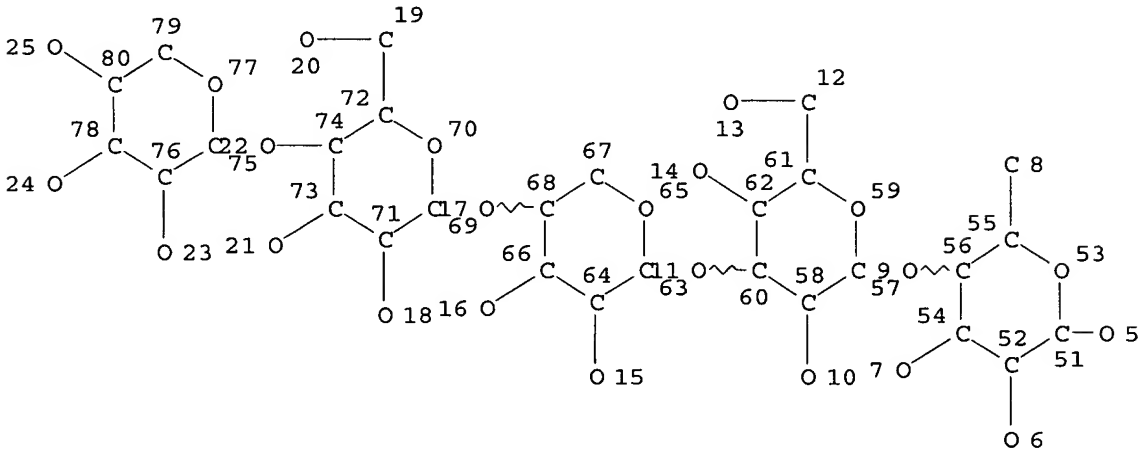

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Page 2-B

NODE ATTRIBUTES:
CONNECT IS E2 RC AT 5
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 80

STEREO ATTRIBUTES: NONE

L21	146	SEA FILE=REGISTRY SSS FUL L19
L24	1	SEA FILE=REGISTRY ABB=ON L21 AND L2
L25	1	SEA FILE=HCAPLUS ABB=ON L24
L26	1445	SEA FILE=HCAPLUS ABB=ON L21
L27	46	SEA FILE=HCAPLUS ABB=ON L26(L)THU/RL
L28	46	SEA FILE=HCAPLUS ABB=ON L25 OR L27

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FILE 'HCAPLUS' ENTERED AT 13:22:42 ON 07 SEP 2006

=> d l28 1-46 ibib abs hitstr hitind

L28  ANSWER 1 OF 46  HCAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:         2006:795811  HCAPLUS
TITLE:                    Method and device for ophthalmic
                          administration of active pharmaceutical
                          ingredients
INVENTOR(S):              Gross, Yossi; Herzog, Rafi; Koevary, Steven B.
PATENT ASSIGNEE(S):       Pharmalight Inc., USA
SOURCE:                   PCT Int. Appl., 127pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
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     WO 2006082588         A2    20060810    WO 2006-IL145
                                                                    2006
                                                                    0206
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             ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
             KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,
             LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ,
             OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,
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         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,
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PRIORITY APPLN. INFO.:                       US 2005-650144P     P
                                                                    2005
                                                                    0207

                                             US 2005-742870P     P
                                                                    2005
                                                                    1207
```

AB Disclosed is the use of a mist of a pharmaceutical composition for ophthalmic delivery of a protein or peptide active pharmaceutical ingredient, a related method of treatment and a device useful in implementing the use and method. Disclosed is also the use of a mist for ophthalmic delivery of a pharmaceutical composition including a highly irritating penetration enhancer and a carrier, a related method of treatment and a device useful in implementing the use and method. Disclosed is also a device for ophthalmic administration configured to direct a mist of a pharmaceutical composition to the eye only when the eye is open. Disclosed is also a self-sterilizing device for ophthalmic administration. Disclosed is also a device and a method for increasing the bioavailability

of an ophthalmically administered drug in a pharmaceutical composition

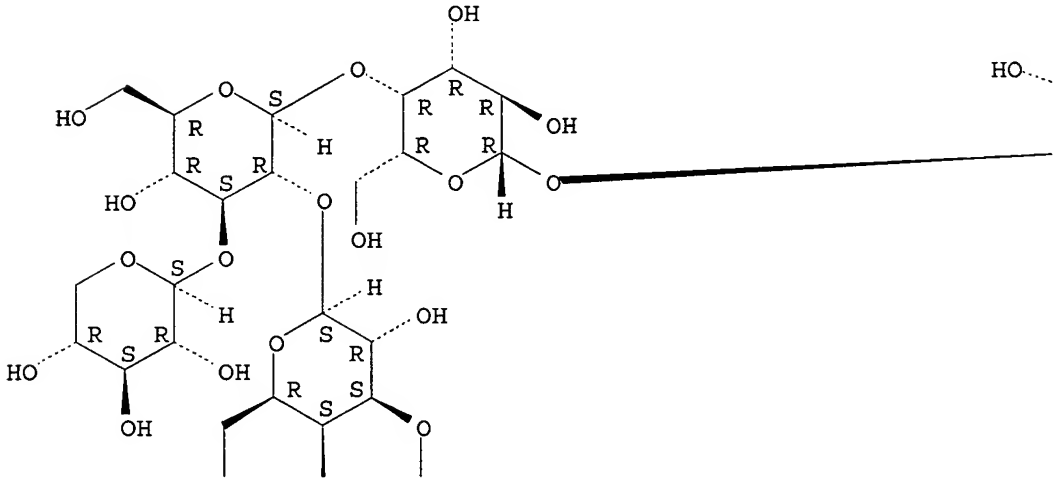
IT **11024-24-1**, Digitonin
(method and device for ophthalmic administration of pharmaceutical ingredients)

RN 11024-24-1 HCAPLUS

CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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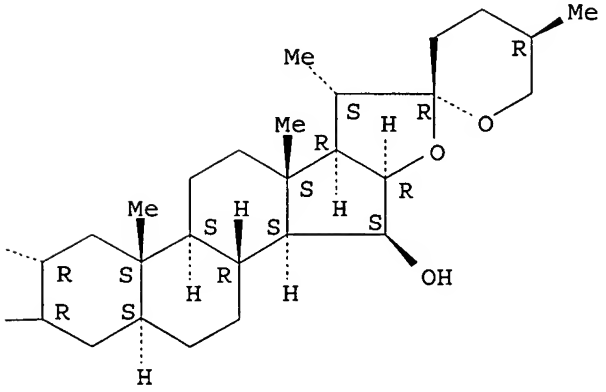

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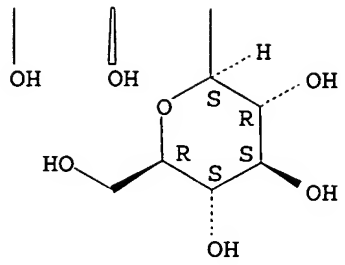

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1

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2013-58-3, Meclocycline 2058-46-0, Oxytetracycline hydrochloride 2098-66-0, Cyproterone 2135-17-3, Flumethasone 2152-44-5, Betamethasone valerate 2398-96-1, Tolnaftate 2529-45-5, Flurogestone acetate 2668-66-8, Medrysone 2687-91-4, 1-Ethyl-2-pyrrolidone 2717-15-9, Triethanolamine oleate 2917-73-9, Dibutyl azelate 2919-66-6, Melengestrol acetate 2935-44-6, 2,5-Hexanediol 3000-39-3, Quingestanol acetate 3079-28-5, Decyl methyl sulfoxide 3090-70-8 3093-35-4, Halcinonide 3116-76-5, Dicloxacillin 3137-73-3, Anagestone acetate 3232-84-6, Urazole 3362-45-6, Noxiptilin 3380-34-5, Triclosan 3385-03-3, Flunisolide 3521-62-8, Erythromycin estolate 3562-63-8, Megestrol 3577-01-3, Cephaloglycin 3687-46-5, Decyl oleate 3693-39-8, Flucloronide 3697-42-5, Chlorhexidine hydrochloride 3810-74-0, Streptomycin sulfate 3841-11-0, Fluperolone 3922-90-5, Oleandomycin 3924-70-7, Amcinafal 3963-95-9, Methacycline hydrochloride 4317-14-0 4394-00-7, Niflumic acid 4419-39-0, Beclomethasone 4498-32-2, Dibenzepin 4602-84-0, Farnesol 4697-36-3, Carbenicillin 4757-55-5, Dimetacrine 4828-27-7, Clocortolone 5003-48-5, Benorylate 5075-92-3, 1,5-Dimethyl-2-pyrrolidone 5104-49-4, Flurbiprofen 5118-29-6, Melitracen 5138-18-1D, Sulfosuccinic acid, salts 5250-39-5, Floxacillin 5422-34-4, Lactamide MEA 5424-40-8 5534-09-8, Beclomethasone dipropionate 5560-72-5, Iprindole 5593-20-4, Betamethasone dipropionate 5663-98-9 5714-73-8, Methenamine hippurate 5721-91-5, Testosterone decanoate 5728-52-9, Felbinac 5786-21-0, Clozapine 5953-68-4, Androsterone propionate 5953-69-5, Androsterone benzoate 6242-26-8 6440-58-0, DMDM hydantoin 6533-00-2, Norgestrel 6640-24-0 6740-88-1, Ketamine 6829-98-7, Imipramine N-oxide 6915-15-7, Malic acid 6938-94-9, Diisopropyl adipate 6990-06-3, Fusidic acid 6990-06-3D, Fusidic acid, derivs. 6998-60-3, Rifamycin 7008-26-6, Dichlorisone 7332-27-6, Amcinafide 7416-34-4, Molindone 7491-02-3, Diisopropyl sebacate 7542-37-2, Paromomycin 7631-90-5, Sodium bisulfite 7642-64-0, Nandrolone furylpropionate 7647-01-0, Hydrochloric acid 7664-38-2, Phosphoric acid 7664-93-9, Sulfuric acid 7664-93-9D, Sulfuric acid, alkyl esters 7753-60-8, Anecortave acetate 8025-81-8, Spiramycin 8064-90-2 8067-69-4, Halquinols 9001-54-1, Hyaluronidase 9001-63-2, Lysozyme 9001-99-4, Ribonuclease 9002-60-2, ACTH 9002-72-6, Somatotropin 9002-89-5, Poly(vinyl alcohol) 9002-89-5D, Poly(vinyl alcohol), quaternized 9002-92-0, Brij 35 9003-01-4D, Polyacrylic acid, thiolated 9003-13-8, Polypropylene glycol butyl ether 9003-39-8, Polyvinylpyrrolidone 9004-10-8, Insulin 9004-61-9, Hyaluronic acid 9004-81-3, Polyethylene glycol monolaurate 9004-82-4, Sodium lauryl ether sulfate 9004-95-9, Polyoxyethylene cetyl ether 9004-98-2, Brij-98 9004-99-3, Polyoxyethylene stearate 9005-00-9, Brij 78 9005-25-8, Starch 9005-25-8D, Starch, derivs. 9005-63-4, Polyoxyethylene sorbitan 9005-64-5, Polyoxyethylene sorbitan monolaurate 9007-12-9, Calcitonin 9007-92-5, Glucagon 9008-54-2, Circulin 9015-82-1, Angiotensin converting enzyme 9016-00-6, Polydimethyl siloxane 9034-39-3, Growth hormone releasing hormone 9034-40-6, Gonadotropin releasing hormone 9035-85-2, Polyoxypropylene cetyl ether 9036-19-5, Octylphenoxy polyethoxyethanol 10118-90-8, Minocycline 10262-69-8, Maprotiline 10321-12-7, Propizepine 10418-03-8, Stanozolol 10437-36-2 11000-17-2, Vasopressin 11003-38-6, Capreomycin **11024-24-1**, Digitonin 11103-57-4, Vitamin A 11111-12-9D, Cephalosporins, derivs.

12026-18-5, Aluminum magnesium oxide silicate (Al4Mg2O3(SiO3)5)
12619-70-4, Cyclodextrin 12650-69-0, Mupirocin 13009-99-9,
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13539-59-8, Azapropazone 13609-67-1, Hydrocortisone butyrate
13614-98-7, Minocycline hydrochloride 13710-19-5, Tolfenamic
acid 13840-40-9, Phosphine oxide 14028-44-5 14066-79-6,
Chlorprednisone acetate 14291-86-2 14340-01-3, Gestadene
15307-86-5, Diclofenac 15574-96-6, Pizotyline
(method and device for ophthalmic administration of
pharmaceutical ingredients)

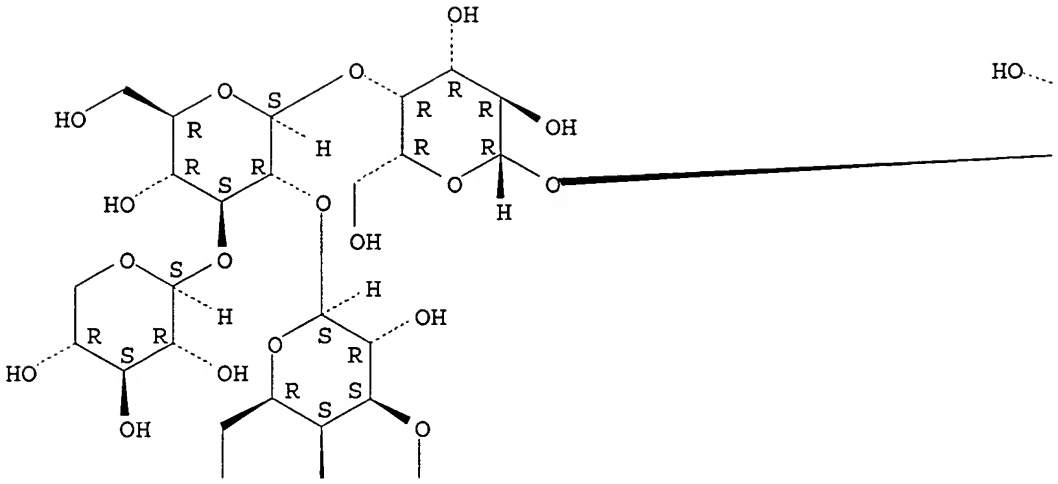
L28 ANSWER 2 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:646852 HCAPLUS
DOCUMENT NUMBER: 145:137795
TITLE: Method for screening action target of cardiac glycoside drug using proteomics technology
INVENTOR(S): Gao, Haiqing; Qiu, Jie; Jia, Jijun; Chen, Chunyan; Ma, Yabing
PATENT ASSIGNEE(S): Shandong Univ., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 14 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1793933	A	20060628	CN 2005-10129839	2005 1205
PRIORITY APPLN. INFO.:			CN 2004-10075826 A	2004 1227

AB The title method comprises: (1) culturing cardiac muscle cell and establishing action model of cardiac glycoside drug on cardiac muscle cell, (2) preparing cardiac muscle two-dimensional electrophoresis protein samples, carrying out two-dimensional gel electrophoresis, and analyzing image to obtain differential expression protein, (3) gel-digesting differential protein, determining differential protein peptide mass fingerprinting by mass spectrometry (MS), and identifying and analyzing the differential protein bu suing sequence database, and (4) deriving DNA sequence. This method can be directly used in guiding research for developing new anti-heart failure drugs with highly effectiveness and low toxicity.
IT **11024-24-1**, Digitonin
(method for screening action target of cardiac glycoside drug using proteomics technol.)
RN 11024-24-1 HCAPLUS
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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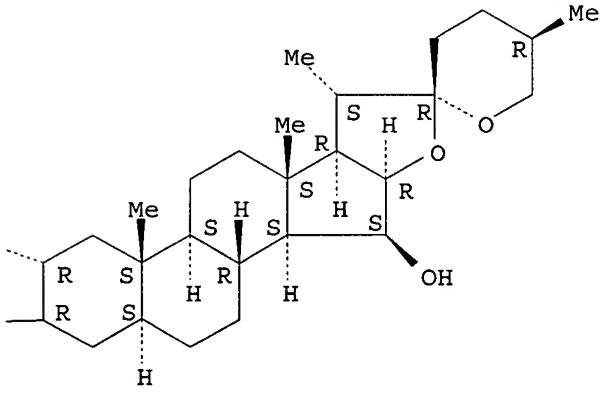

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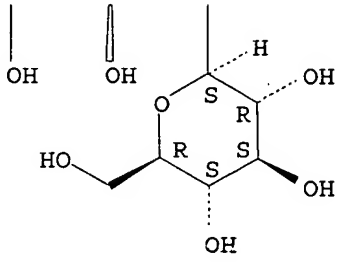
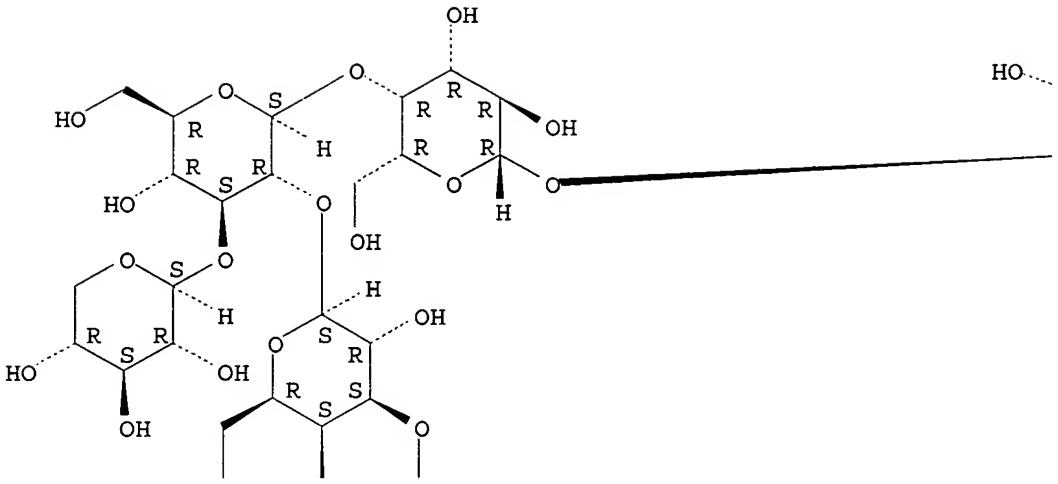


CC 1-1 (Pharmacology)
IT 11005-63-3, Strophanthin **11024-24-1**, Digitonin
(method for screening action target of cardiac glycoside drug using proteomics technol.)

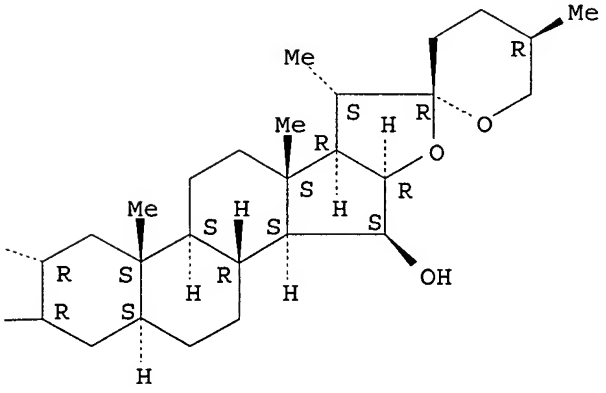
L28 ANSWER 3 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:518006 HCAPLUS
DOCUMENT NUMBER: 145:180287
TITLE: Inhibition of Candida rugosa lipase by saponins, flavonoids and alkaloids
AUTHOR(S): Ruiz, Cristian; Falcocchio, Serena; Xoxi, Entela; Villo, Ly; Nicolosi, Giovanni; Pastor, F. I. Javier; Diaz, Pilar; Saso, Luciano
CORPORATE SOURCE: Department of Human Physiology and Pharmacology Vittorio Erspamer, University of Rome La Sapienza, Rome, 00185, Italy
SOURCE: Journal of Molecular Catalysis B: Enzymatic (2006), 40(3-4), 138-143
CODEN: JMCEF8; ISSN: 1381-1177
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Lipase inhibitors have generated a great interest because they could help in the prevention or the therapy of lipase-related diseases. Therefore, the aim of the work was to evaluate by HPLC, and using Candida rugosa lipase as model, the inhibitory effect of several saponins: β-aescin, digitonin, glycyrrhizic acid (GA) and Quillaja saponin (QS); flavonoids: 3-hydroxyflavone, 5-hydroxyflavone, (±)-catechin and kaempferol; and alkaloids: aspidospermine, papaverine, physostigmine, pilocarpine, raubasine, rescinnamine, reserpine and trigonelline. The inhibition produced by most of these compds. is described here for the first time. Saponins appeared very active, being β-aescin and digitonin the most active compds. (IC50 = 0.8-2.4 + 10-5 M). The inhibitory activity of flavonoids was lower than that of saponins (except GA), and (±)-catechin and kaempferol were the most active. Alkaloids was the most heterogeneous group assayed, varying from rescinnamine, with an IC16 similar to that of digitonin, to papaverine and others which showed almost no inhibition. In conclusion, β-aescin, digitonin, kaempferol or (±)-catechin, strong lipase inhibitors with a low toxicity and present herbal drugs used for lipase-related diseases such as acne or ulcer, are promising candidates for the prevention or the treatment of these diseases.
IT **11024-24-1**, Digitonin
(inhibition of Candida rugosa lipase by saponins, flavonoids and alkaloids)
RN 11024-24-1 HCAPLUS
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

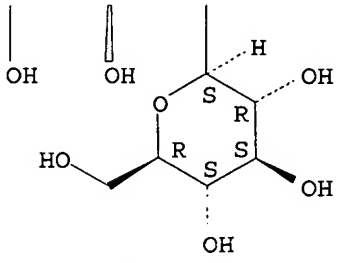
PAGE 1-A



PAGE 1-B



PAGE 2-A



CC 1-5 (Pharmacology)
Section cross-reference(s): 10
IT 50-55-5, Reserpine 57-47-6, Physostigmine 58-74-2, Papaverine 92-13-7, Pilocarpine 466-49-9, Aspidospermine 483-04-5, Raubasine 491-78-1, 5-Hydroxyflavone 520-18-3, Kaempferol 535-83-1, Trigonelline 577-85-5, 3-Hydroxyflavone 1405-86-3, Glycyrrhizic acid 7295-85-4, (±)-Catechin **11024-24-1**, Digitonin 11072-93-8, β-Aescin 24815-24-5, Rescinnamine
(inhibition of Candida rugosa lipase by saponins, flavonoids and alkaloids)
REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 4 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:518005 HCAPLUS
DOCUMENT NUMBER: 145:180654
TITLE: Propionibacterium acnes GehA lipase, an enzyme involved in acne development, can be successfully inhibited by defined natural substances
AUTHOR(S): Falcocchio, Serena; Ruiz, Cristian; Pastor, F. I. Javier; Saso, Luciano; Diaz, Pilar
CORPORATE SOURCE: Department of Microbiology, Faculty of Biology, University of Barcelona, Barcelona, 08028, Spain
SOURCE: Journal of Molecular Catalysis B: Enzymatic (2006), 40(3-4), 132-137
CODEN: JMCEF8; ISSN: 1381-1177
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Propionibacterium acnes, a usual inhabitant of human skin, plays an important role in acne development, related to the production of numerous enzymic activities involved in the degradation of host mols. Among these enzymes, P. acnes lipase (GehA, glycerol-ester hydrolase A) was recognized as one of the major factors in the pathogenesis of acne, being responsible for the hydrolysis of sebum and the release of inflammatory compds. Anti-acne treatments are based on the use of retinoids or benzoyl peroxide, frequently in combination with antibiotics. However, the low effectiveness of such treatments and the increasing antibiotic resistance has led to the development of alternative therapies such as Kampo formulations, containing traditional herbal drugs. Search for new anti-acne treatments led us to perform the cloning, characterization, and inhibition of P. acnes GehA, considered an interesting pharmaceutical target for anti-acne therapies. The genetic, mol., and biochem. properties of the cloned lipase were analyzed, and several inhibitor agents were tested, including natural substances like saponins, alkaloids, or flavonoids. Among these, the flavonoids (±)-catechin and kaempferol were the most promising candidates for acne treatment, whereas saponins like glycyrrhizic acid and digitonin produced a lower inhibition of the enzyme. No inhibition by alkaloids was found. Therefore, the inhibition caused by (±)-catechin and kaempferol on GehA, together with their wide anti-acne properties and low toxicity, make them very suitable candidates for the treatment of acne and other P. acnes-related diseases.
IT **11024-24-1**, Digitonin

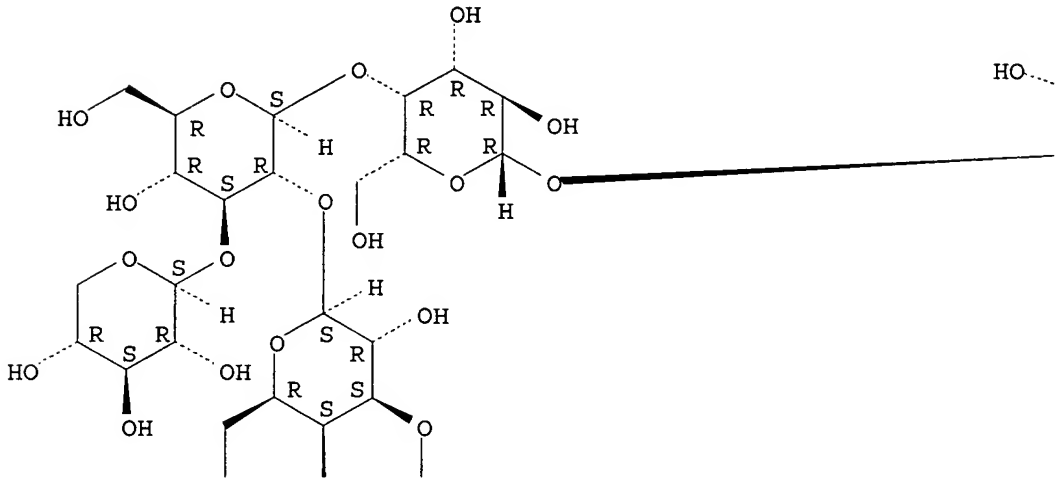
(inhibition of Propionibacterium acnes lipase by natural substances)

RN 11024-24-1 HCAPLUS

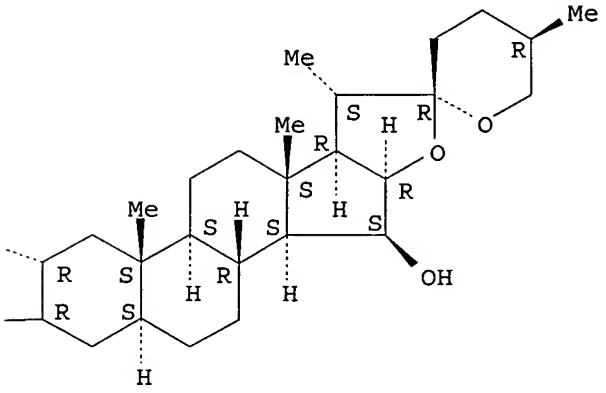
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

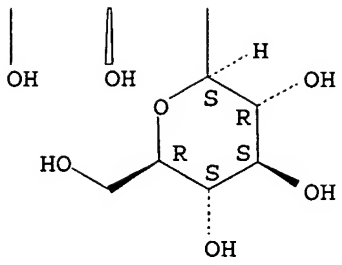
PAGE 1-A



PAGE 1-B



PAGE 2-A



CC 1-10 (Pharmacology)
IT 50-55-5, Reserpine 520-18-3, Kaempferol 1126-48-3, p-Hydroxymercuribenzoic acid 1405-86-3, Glycyrrhizic acid 2466-76-4, N-Acetylimidazole 7295-85-4, (±)-Catechin 7440-39-3, Barium, biological studies 7440-48-4, Cobalt, biological studies **11024-24-1**, Digitonin 11072-93-8, β-Aescin 24815-24-5, Rescinnamine
(inhibition of Propionibacterium acnes lipase by natural substances)
REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 5 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1300008 HCAPLUS
DOCUMENT NUMBER: 144:142679
TITLE: Effects of digitonin on hyperglycaemia and dyslipidemia induced by high-sucrose intake
AUTHOR(S): Ebaid, Geovana M. X.; Faine, Luciane A.; Diniz, Yeda S.; Rodrigues, Hosana G.; Galhardi, Cristiano M.; Ribas, Bartolome O.; Fernandes, Ana Angelica H.; Novelli, Ethel L. B.
CORPORATE SOURCE: Post Graduation Course Department of Clinical and Cardiology, Faculty of Medicine, UNESP, Sao Paulo, CEP 18618-000, Brazil
SOURCE: Food and Chemical Toxicology (2006), 44(2), 293-299
CODEN: FCTOD7; ISSN: 0278-6915
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB This study examined whether high-sucrose intake effects on lipid profile and oral glucose tolerance may be inhibited by a single administration of digitonin, a saponin from the seeds of Digitalis purpurea Male Wistar 24 rats were initially divided into two groups : (C) was given standard chow and water; (S) received standard chow and 30% sucrose in its drinking water. After 30 days of treatments, C rats were divided into two groups : (CC) given an intra-gastric dose 0.5 mL saline; (CD) given a single intra-gastric dose of 15 mg/kg digitonin. S rats were also divided into two groups : (SC) given intra-gastric saline and (SD) given digitonin. Rats were sacrificed after the oral glucose tolerance test (OGTT) at 2 h after the digitonin administration. S rats had higher total energy intake and final body weight than C. SC rats had fasting hyperglycemia and impaired OGTT. Digitonin in SD group improved the glucose tolerance. Triacylglycerol (TG),

very-low-d. lipoprotein (VLDL-C) and free fatty acid (FFA) serum concns. were increased in SD rats from CC. Digitonin in SD rats decreased FFA and led TG and VLDL-C concns. at the levels observed in the CC group. Despite the enhanced cholesterol in CD group from CC, the high-d. lipoprotein (HDL-C) was increased in these animals. HDL-C/TG ratio was higher in CD and SD than in CC and SC, resp. No significant differences were observed in lipid hydroperoxide (LH) between the groups. VLDL-C/LH ratio and gamma-glutamyl transferase (GGT) activity were increased in SC group and were decreased in SD rats from the SC. In conclusion digitonin enhanced glucose tolerance and had beneficial effects on serum lipids by improved antioxidant activity.

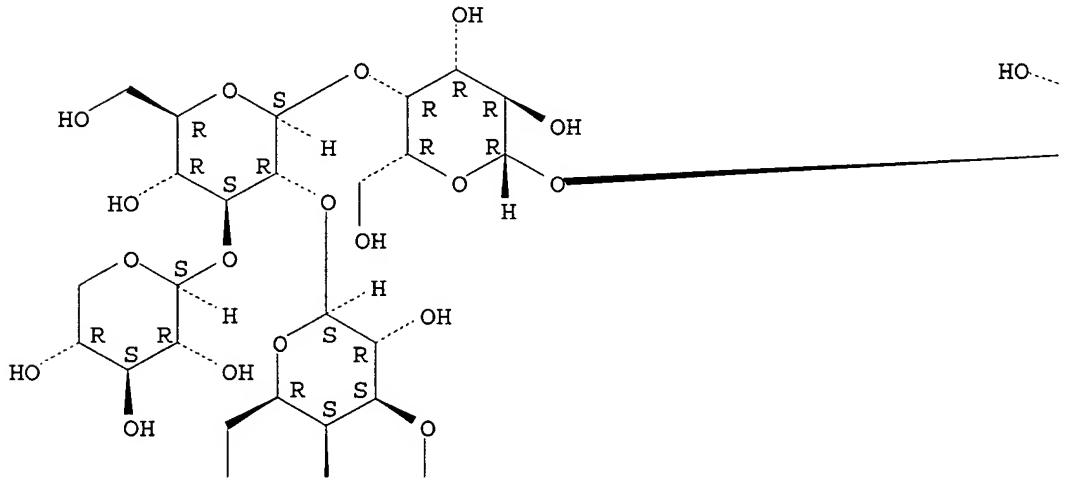
IT **11024-24-1**, Digitonin
(effects of digitonin on glucose tolerance and dyslipidemia after high-sucrose intake in relation to antioxidant activity)

RN 11024-24-1 HCAPLUS

CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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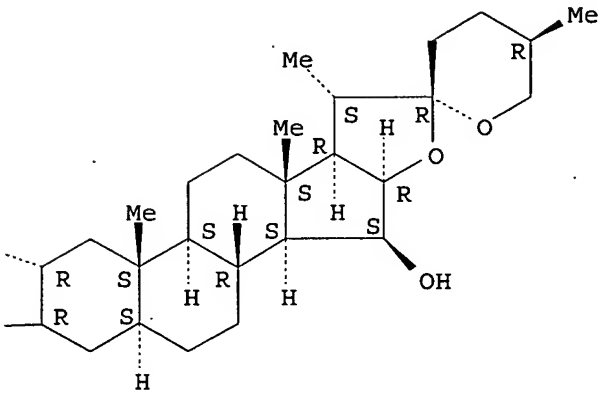
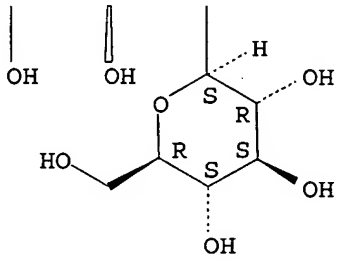


PAGE 2-A



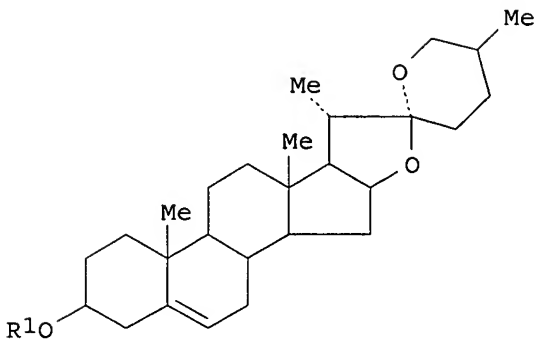
CC 1-10 (Pharmacology)
IT **11024-24-1**, Digitonin
(effects of digitonin on glucose tolerance and dyslipidemia after high-sucrose intake in relation to antioxidant activity)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 6 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1089573 HCAPLUS
DOCUMENT NUMBER: 143:343180
TITLE: Method for preparation of steroidal saponins and pharmaceutical composition for treating superficial and deep fungous infection
INVENTOR(S): Zhang, Yi; Du, Guanhua; Jiang, Xiaoyan; Ding, Yi
PATENT ASSIGNEE(S): Wuhan University, Peop. Rep. China; Institute of Materia Medica, Chinese Academy of Medical Sciences
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 16 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

CN 1563074	A	20050112	CN 2004-10013058	2004 0420
PRIORITY APPLN. INFO.:			CN 2004-10013058	2004 0420

GI



I

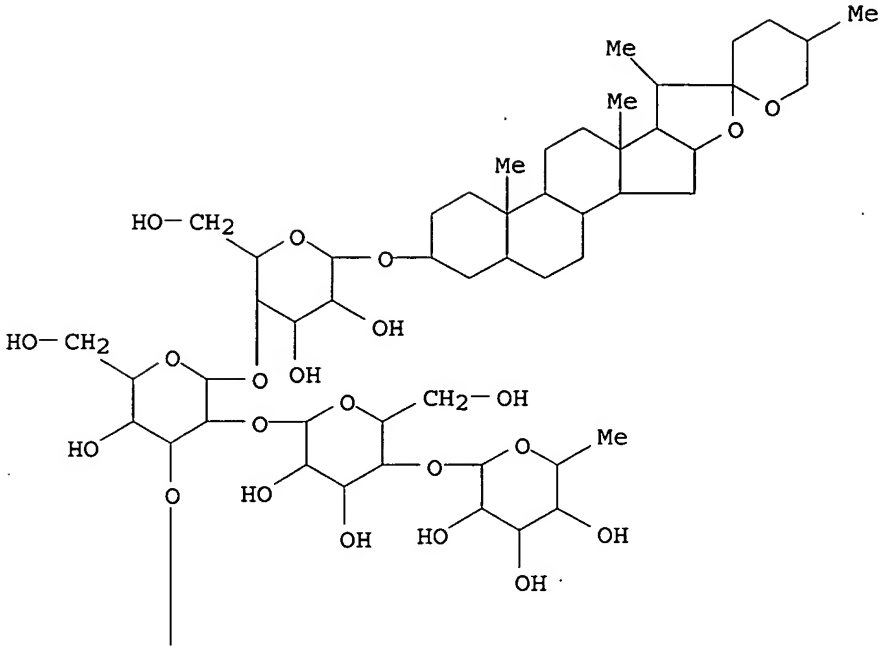
AB Steroidal saponins I (R1 = [(1->3)-β-D-glucopyranosyl]-[(1->2)-6-deoxy-α-L-mannopyranosyl]-β-D-glucopyranosyl, [6-deoxy-(1->4)-α-L-mannopyranosyl]-[6-deoxy-(1->2)-α-L-mannopyranosyl]-β-D-glucopyranosyl) were prepared from Dioscorea collettii Hook root dried powder, using 75% ethanol refluxing for 2 h, vacuum evaporation to give the extractant, adding water and stirring for 4 h, after centrifuge, the aqueous layer was extracted with butanol, further purified on silicon gel column to provide Collettinside III and Collettinside IV. The obtained products can be used as pharmaceutical composition for treating superficial and deep fungous infection.

IT **149664-94-8P**, Dongnoside A
(preparation of steroidal saponins as antifungal agent)

RN 149664-94-8 HCAPLUS

CN β-D-Galactopyranoside, (3β,5α,25R)-spirostan-3-yl O-6-deoxy-α-L-mannopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→2)-O-[O-β-D-xylopyranosyl-(1→3)-β-D-glucopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

PAGE 1-A



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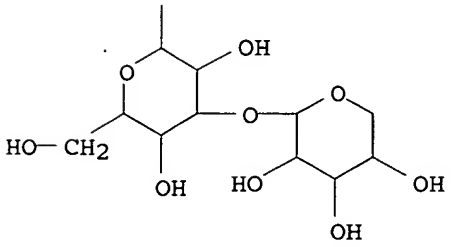


IC ICM C07J073-00
ICS A61K031-7048; A61P031-10
CC 11-1 (Plant Biochemistry)
Section cross-reference(s): 32, 63
IT 60478-68-4P, Collettinside III 88668-53-5P, Collettinside IV
149664-94-8P, Dongnoside A
(preparation of steroidal saponins as antifungal agent)

L28 ANSWER 7 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1028067 HCAPLUS
DOCUMENT NUMBER: 143:311939
TITLE: Isolation of tigogenin pentaglycoside from Chlorophytum nimonii
INVENTOR(S): Vijay, Lakshmi; Pandey, Kartikay; Roy, Raja; Joshi, Bhawani Shankar; Kunnath, Padmanabhan Madhusudanan; Chandra, Ramesh; Srivastava, Arvind Kumar; Raina, Deepak; Rastogi, Anil

Kumar
PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, India
SOURCE: U.S. Pat. Appl. Publ., 9 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005209168	A1	20050922	US 2004-806065	2004 0322

PRIORITY APPLN. INFO.: US 2004-806065 2004 0322

AB The present invention provides a novel saponin tigogenin pentaglycoside isolated from the aerial parts of C. nimonii and a process for the isolation thereof as well as its use in anti-hyperglycemic and hypolipidemic activities. Aerial parts of C. nimonii were extracted with MeOH and the solvent was removed from the extract to give the tigogenin pentaglycoside.

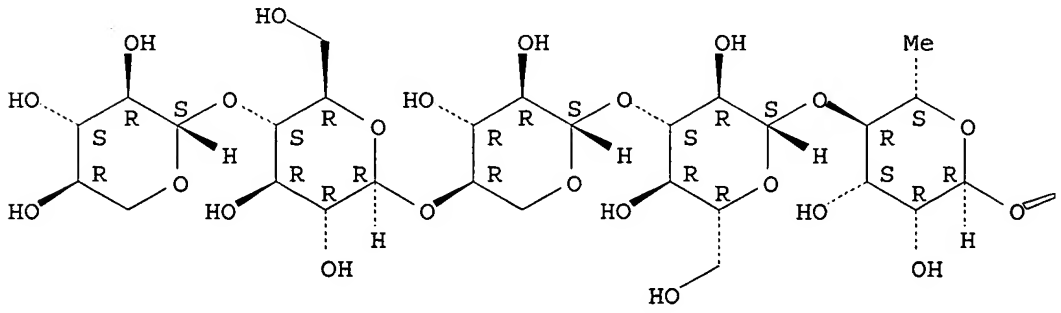
IT **864969-11-9**
(tigogenin pentaglycoside from Chlorophytum nimonii)

RN 864969-11-9 HCAPLUS

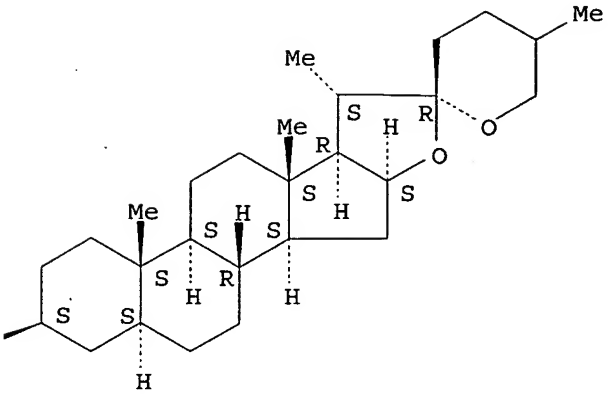
CN α-L-Mannopyranoside, (3β,5α)-spirostan-3-yl O-β-D-xylopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→4)-O-β-D-xylopyranosyl-(1→3)-O-β-D-glucopyranosyl-(1→4)-6-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



IC ICM C07J017-00
ICS A61K031-704
INCL 514026000; 536006300
CC 63-4 (Pharmaceuticals)
Section cross-reference(s): 1, 11
IT **864969-11-9**
(tigogenin pentaglycoside from Chlorophytum nimonii)

L28 ANSWER 8 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:921767 HCAPLUS
DOCUMENT NUMBER: 143:432145
TITLE: Pharmacological modulation of lung cancer cells for potassium ion depletion
AUTHOR(S): Andersson, Britta; Behnam-Motlagh, Parviz; Henriksson, Roger; Grankvist, Kjell
CORPORATE SOURCE: Department of Medical Biosciences, Clinical Chemistry, Umeaa University, Umeaa, Swed.
SOURCE: Anticancer Research (2005), 25(4), 2609-2616
CODEN: ANTRD4; ISSN: 0250-7005
PUBLISHER: International Institute of Anticancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Background: Depletion of intracellular potassium ions (K+) is necessary for cells to shrink, induce DNA fragmentation and activate caspases, events which are features of apoptosis. Materials and Methods: We used 86Rb+ as a K+ analog to evaluate the possibility of pharmacol. depleting human pulmonary mesothelioma (P31) and small cell lung cancer (U1690) cells of K+, for future use in studies of apoptosis induction. Results: The Na+, K+, 2Cl--cotransport inhibitor bumetanide transiently inhibited 86Rb+ influx, but when combined with the Na+, K+, ATPase pump inhibitor ouabain there was a marked and lasting (up to 6 h) 86Rb+ influx inhibition. Cellular K+ efflux was augmented by amphotericin B, digitonin and nigericin. Amphotericin B was an effective 86Rb+ efflux stimulator with low cytotoxicity, whereas digitonin caused cell detachment and nigericin increased LDH release in the U1690 cell line, indicating considerable toxicity of the drugs. Conclusion: It is possible to efficiently reduce intracellular K+ by persistent K+ influx inhibition and simultaneous K+ efflux stimulation with clin. available drugs.
IT **11024-24-1**, Digitonin

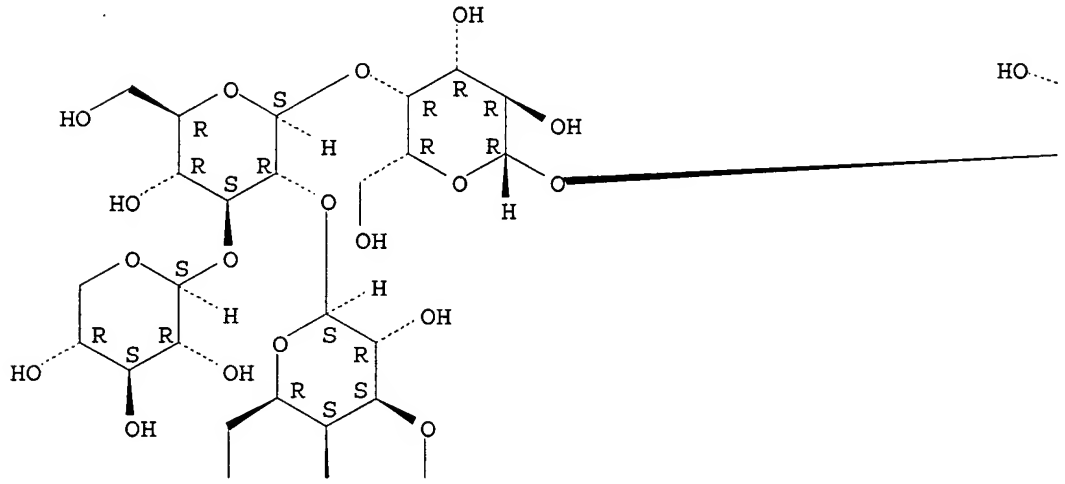
(digitonin caused cell detachment in pulmonary mesothelial P31 and small cell lung cancer U1690 cell line)

RN 11024-24-1 HCAPLUS

CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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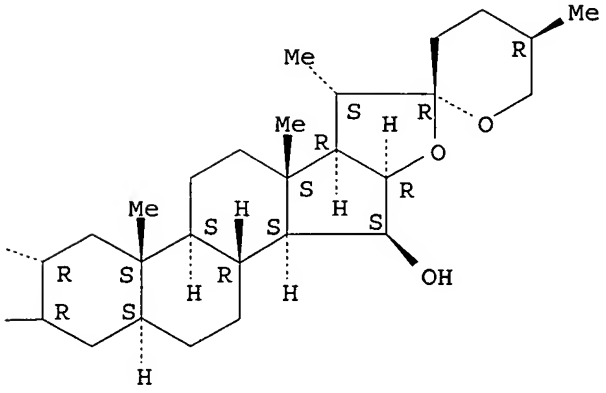
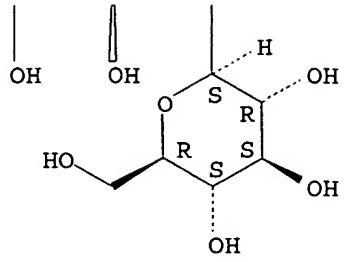


PAGE 2-A



CC 1-6 (Pharmacology)
IT **11024-24-1**, Digitonin
(digitonin caused cell detachment in pulmonary mesothelial P31 and small cell lung cancer U1690 cell line)
REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 9 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:612320 HCAPLUS
DOCUMENT NUMBER: 143:130099
TITLE: Isolation, antihyperglycemic and hypolipidemic activities of tigogenin pentaglycoside from Chlorophytum nimonii
INVENTOR(S): Lakshmi, Vijay; Pandey, Kartikay; Roy, Raja; Joshi, Bhawani Shankar; Kunnath, Padmanabhan Madhusudanan; Chandra, Ramesh; Srivastava, Arvind Kumar; Raina, Deepak; Rastogi, Anil Kumar
PATENT ASSIGNEE(S): Council of Scientific & Industrial Research, India
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005063790	A1	20050714	WO 2003-IN475	2003 1231
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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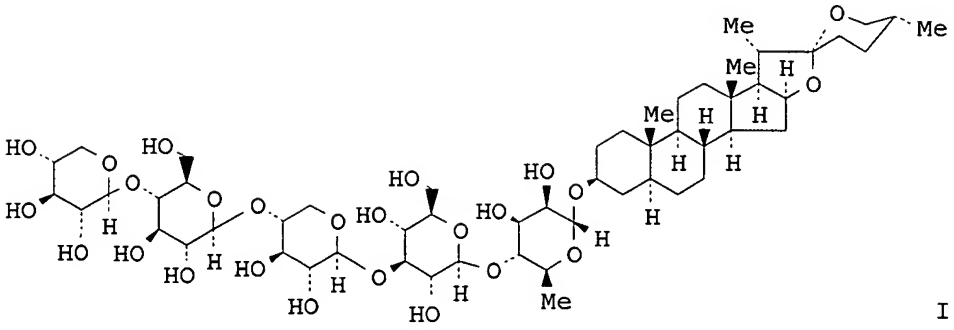
PRIORITY APPLN. INFO.: WO 2003-IN475 A 2003 1231

2003 1231

GI



I

AB The invention discloses a process for the isolation of a tigogenin pentaglycoside (I) from the aerial parts of Chlorophytum nimonii. The isolated saponin I was evaluated for its therapeutic usage as an antihyperglycemic and hypolipidemic agent.

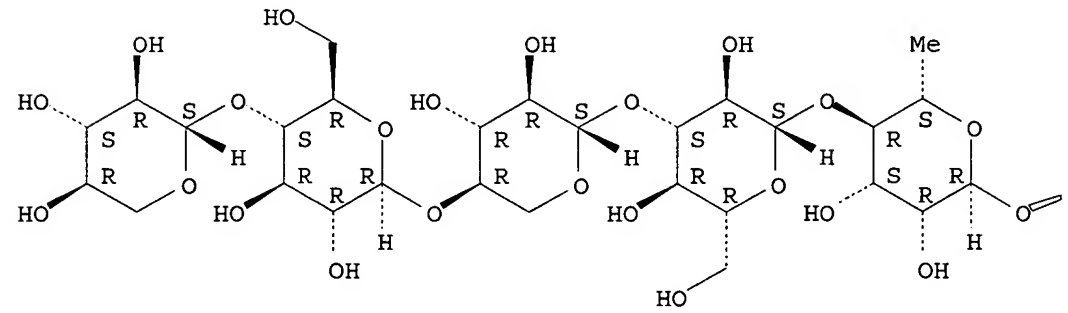
IT **857886-92-1P**
(isolation, anti-hyperglycemic and hypolipidemic activities of tigogenin pentaglycoside from Chlorophytum nimonii)

RN 857886-92-1 HCAPLUS

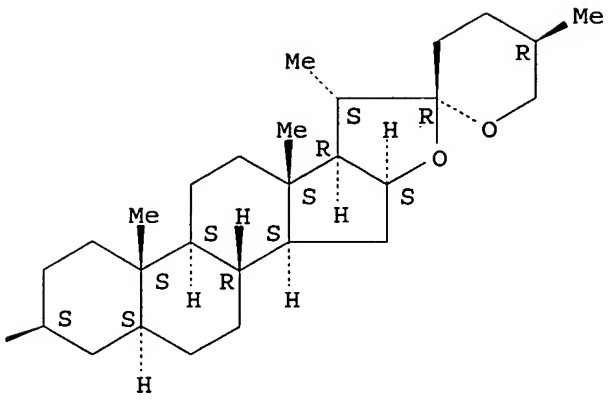
CN α-L-Mannopyranoside, (3β,5α,25R)-spirostan-3-yl O-β-D-xylopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→4)-O-β-D-xylopyranosyl-(1→3)-O-β-D-glucopyranosyl-(1→4)-6-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



IC ICM C07J071-00
ICS A61K031-58; A61P003-06
CC 11-1 (Plant Biochemistry)
Section cross-reference(s): 1, 33, 63
IT **857886-92-1P**
(isolation, anti-hyperglycemic and hypolipidemic activities of tigogenin pentaglycoside from Chlorophytum nimonii)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 10 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:589488 HCAPLUS
DOCUMENT NUMBER: 143:465771
TITLE: A methodology to study intracellular distribution of nanoparticles in brain endothelial cells
AUTHOR(S): Garcia-Garcia, Elizabeth; Andrieux, Karine; Gil, Sophie; Kim, Hyun Ryoung; Doan, Trung Le; Desmaele, Didier; d'Angelo, Jean; Taran, Frederic; Georgin, Dominique; Couvreur, Patrick
CORPORATE SOURCE: Laboratory of Biopharmacy and Pharmaceutical Technology, UMR CNRS 8612, Faculty of Pharmacy, University of Paris-XI, Chatenay-Malabry, 92296, Fr.
SOURCE: International Journal of Pharmaceutics (2005), 298(2), 310-314
CODEN: IJPHDE; ISSN: 0378-5173
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Cell internalization and intracellular distribution of PEG-coated polyhexadecylcyanoacrylate (PEG-PHDCA) nanoparticles in rat brain endothelial cells (RBEC) have been investigated. A cell fractionation method has been developed based on the selective permeabilization of RBEC plasma membrane by digitonin. By interacting with membrane cholesterol, digitonin creates pores allowing the release of soluble and diffusible species outside the cell. The selectivity of plasma membrane permeabilization was

controlled by using compartment markers such as lactate dehydrogenase (LDH) for cytoplasm and cathepsin B for lysosomes. An optimal digitonin concentration of 0.003% (w/v) has been identified to induce a pattern of membrane permeabilization corresponding to the extraction of 72% LDH and less than 15% of Cathepsin B. Membrane permeabilization at this digitonin concentration allows one to distinguish between the cell cytoplasm and its endo/lysosomal fraction. This methodol. was applied to investigate the intracellular distribution of the nanoparticles after their incubation with the RBEC. The results showed that PEG-PHDCA nanoparticles were able to be internalized to a higher extent than PHDCA nanoparticles (after 20 min incubation). Addnl., these nanoparticles displayed different patterns of intracellular capture, depending on their sp. surface composition: PEG-PHDCA nanoparticles were 48% in the plasma membrane, 24% in the cytoplasm, 20% in vesicular compartments and 8% associated with the fraction of the nucleus, the cytoskeleton and caveolae suggesting that PEG-PHDCA nanoparticle uptake by RBEC is specific and presumably due to endocytosis. Confocal microscopy studies confirmed the cellular uptake of PEG-PHDCA nanoparticles.

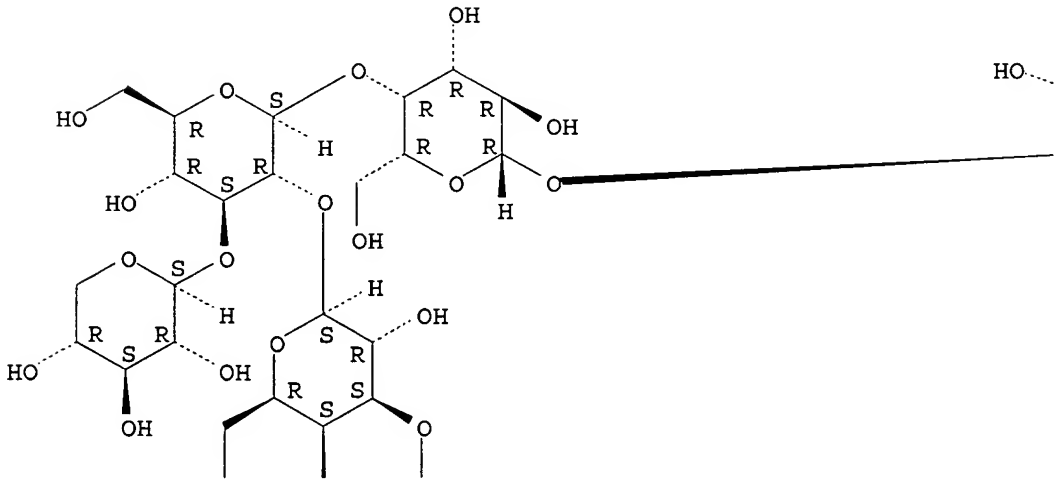
IT **11024-24-1**, Digitonin
(methodol. to study intracellular distribution of nanoparticles in brain endothelial cells)

RN 11024-24-1 HCAPLUS

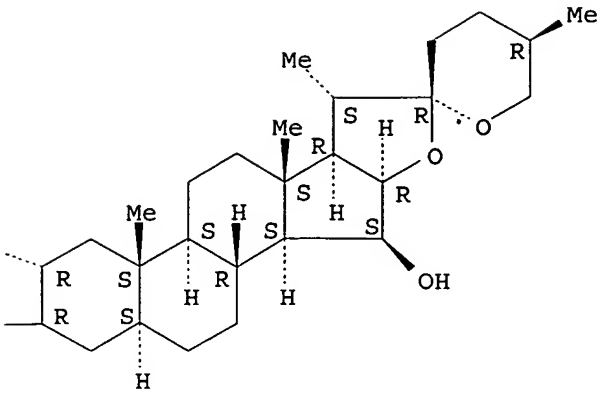
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

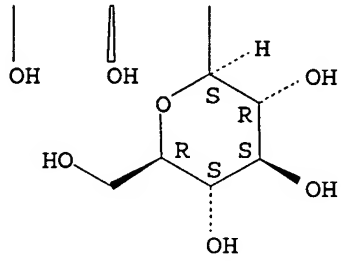
PAGE 1-A



PAGE 1-B



PAGE 2-A



CC 63-5 (Pharmaceuticals)
IT **11024-24-1**, Digitonin
(methodol. to study intracellular distribution of nanoparticles in brain endothelial cells)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 11 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:857373 HCAPLUS
DOCUMENT NUMBER: 141:337758
TITLE: Water-soluble formulations of Digitalis glycosides for treating cell-proliferative and other diseases
INVENTOR(S): Singh, Chandra; Streeper, Robert
PATENT ASSIGNEE(S): Azaya Therapeutics, Inc., USA
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004087121	A2	20041014	WO 2004-US9467	2004

0329

WO 2004087121 A3 20041223
WO 2004087121 C1 20051110
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, US
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
US 2005026849 A1 20050203 US 2004-812316
2004
0329

PRIORITY APPLN. INFO.: US 2003-459466P P
2003
0328

AB A pharmaceutical composition contains at least one Digitalis glycosides such as oleandrin, Odoroside-A, neriifolin, Proscillaridin-A, methylproscillaridin-A, digitoxin, digoxin and amorphous cyclodextrins. In another aspect, the present invention provides an effective method to reduce the growth of cancers or reducing the incidence of metastases. Thus, a formulation contained oleandrin 0.1, sodium ascorbate 0.5, ascorbic acid 0.04, hydroxypropyl β-cyclodextrin 2.5, sodium methylparaben 0.1, sodium propylparaben 0.01, trehalose dihydrate 7.0, and water qs to 100%.

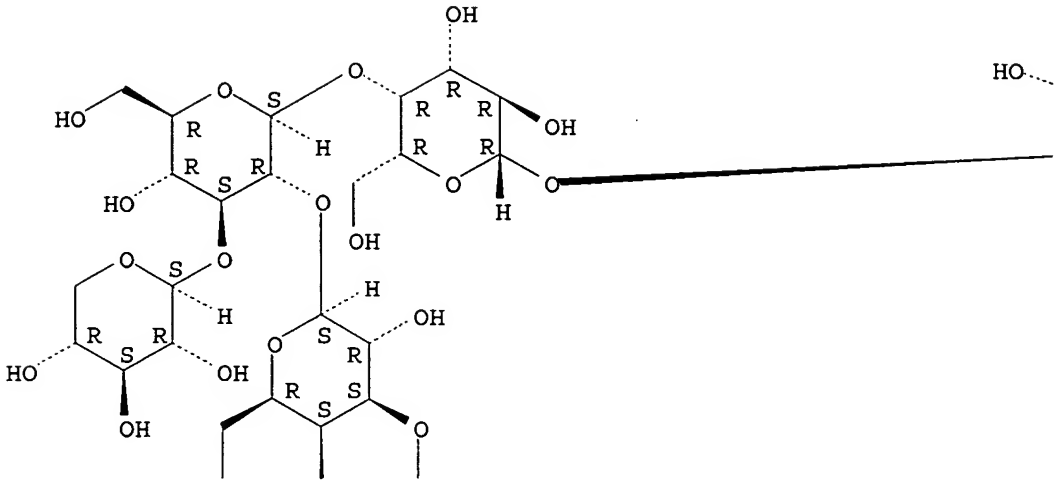
IT **11024-24-1**, DiGitonin
(water-soluble formulations of Digitalis glycosides for treating cell-proliferative diseases)

RN 11024-24-1 HCAPLUS

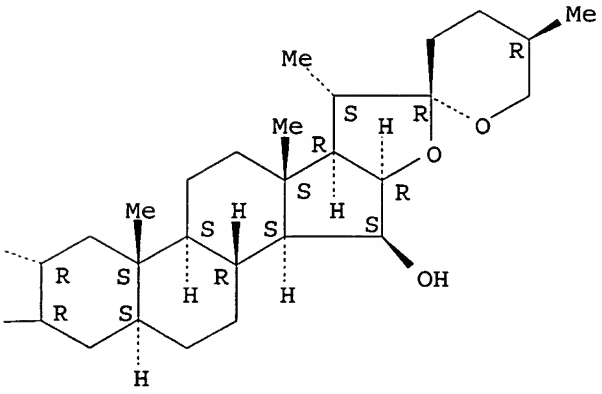
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

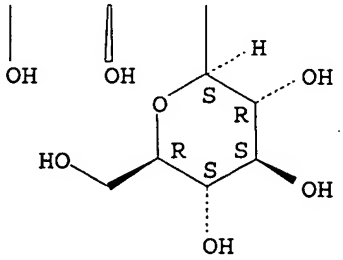
PAGE 1-A



PAGE 1-B



PAGE 2-A



IC ICM A61K031-00
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
IT 50-70-4, Sorbitol, biological studies 50-81-7, Ascorbic acid, biological studies 50-99-7, Glucose, biological studies 57-48-7, Fructose, biological studies 57-50-1, Sucrose, biological studies 63-42-3, Lactose 68-04-2, Sodium citrate 69-65-8, Mannitol 71-63-6, Digitoxin 77-52-1, Ursolic acid 94-13-3, Propylparaben 99-20-7, Trehalose 99-76-3, Methylparaben 121-54-0, Benzethonium chloride 124-99-2, Scillaren A 127-09-3, Sodium acetate 134-03-2, Sodium ascorbate 458-37-7, Curcumin 458-37-7D, Curcumin, derivs. 465-16-7, Oleandrin 465-16-7D, Oleandrin, hydroxypropyl cyclodextrin complexes 465-90-7, Bufotalidin 466-06-8, Proscillaridin A 466-06-8D, Proscillaridin A, hydroxypropyl cyclodextrin complexes 466-07-9, Neriifolin 471-95-4, Bufotalin 501-36-0, Resveratrol 501-36-0D, Resveratrol, derivs. 507-59-5, Scillirosidin 507-60-8, Scilliroside 508-75-8, Convallatoxin 508-77-0, Cymarin 510-58-7, Scilliglaucoside 510-62-3, Scilliglaucosidin 532-32-1, Sodium benzoate 560-54-3, Strophanthidol 560-67-8, Honghelin 562-21-0, Bufotalinin 582-25-2, Potassium benzoate 630-60-4, Ouabain 868-18-8, Sodium tartrate 1182-87-2, Peruvoside 1200-22-2, α-Lipoic acid 1393-22-2, Scillaren B 1393-46-0, Thevetosin 1399-71-9, Helleborin 1405-76-1, Gitalin 1986-70-5, Calotropin 4562-36-1, Gitoxin 4589-95-1, DeacetylTanghinin 5026-62-0, Sodium methylparaben 6138-23-4, Trehalose dihydrate 7044-33-9, Cheirotoxin 7558-79-4, Dibasic sodium phosphate 7558-80-7, Monobasic sodium phosphate 7585-39-9D, β-Cyclodextrin, hydroxypropyl ethers 7681-38-1, Sodium bisulfate 7681-57-4, Sodium metabisulfite 8002-01-5, Adonidin 9000-69-5, Pectin 9000-69-5D, Pectin, derivs. 9007-56-1, Echujin 9041-22-9, β-D-Glucan 9041-22-9D, β-D-Glucan, aminated, carboxymethylated, phosphorylated and sulfated 9042-14-2, Dextran sulfate 11022-62-1, Glucobovoside A **11024-24-1**, DiGitonin 11028-14-1, Bovoside A 11032-44-3, Bovoruboside 12619-70-4, Cyclodextrin 12708-27-9, Hongheloside G 12738-19-1, Odoroside-A 13137-64-9, Periplocin 13289-18-4, Hellebrin 13473-51-3, Convalloside 17179-38-3, Cheiroside A 17465-86-0D, γ-Cyclodextrin, hydroxypropyl ethers 17575-20-1, Lanatoside A 17575-21-2, Lanatoside B 17575-22-3, Lanatoside C 17651-61-5, Adonitoxin 18810-25-8, Odoroside H 20231-81-6, Uzarin 20830-75-5, Digoxin 21857-63-6, Scillirubrosidin 23604-99-1, Scillirubroside 23605-05-2, α-Antiarin 25390-16-3, Tanghinin 25395-32-8, Acetyldigitoxin 25633-33-4, Cerberin 27127-79-3, Thevetin B 28591-01-7, F-Gitonin 30685-43-9, β-Methyl digoxin 31962-94-4, α-Methyl digoxin 32476-67-8, PeriploCymarin 33396-37-1, Methyl proscillaridin A 35285-69-9, Sodium propylparaben 37933-66-7, Thevetin A 38076-40-3, Nigrescin 38098-46-3, Monothioglycerol 51008-91-4, Acetyloleandrin 57364-74-6, Cotyledoside 98633-61-5, SarmentoCymarin 101329-50-4, Bryotoxin A 102694-24-6, Tyledoside A 102694-25-7, Tyledoside B 102694-26-8, Tyledoside D 102694-27-9, Tyledoside F 102694-28-0, Tyledoside G 102694-29-1, Tyledoside C 105608-31-9, Bryotoxin B 105608-32-0, Bryotoxin C 105801-16-9, Orbicuside A 105801-17-0, Orbicuside B 105822-21-7, Orbicuside C 110237-76-8, Rubellin 116988-19-3, Thesiuside 125339-13-1,

Bryophyllin B 155023-39-5, Kalanchoside 773885-55-5, Euonoside 773885-57-7, Euobioside 773885-59-9, Euomonoside 773885-60-2, Lancetoxin A 773885-61-3, Lancetoxin B 773885-62-4, allo-Glaucotoxin 773885-63-5, Corotoxin 773885-64-6, Coroglaucin 773885-66-8, Glaucorin 773885-67-9, Scilliacinoside 773885-68-0, Adonin 773885-91-9, Pseudobufotalin
(water-soluble formulations of Digitalis glycosides for treating cell-proliferative diseases)

L28 ANSWER 12 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:354680 HCAPLUS
DOCUMENT NUMBER: 140:363041
TITLE: Liposomal formulations of digitalis glycosides for treating cell-proliferative and other diseases
INVENTOR(S): Singh, Chandra U.
PATENT ASSIGNEE(S): Azaya Therapeutics Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 21 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004082521	A1	20040429	US 2003-404902	2003 0331
PRIORITY APPLN. INFO.:			US 2002-368880P	P 2002 0329

AB The present invention provides methods, prepns., and uses of a variety of liposomal-digitalis glycoside compns. The present invention also provides protein-stabilized nanoparticle formulations containing liposomal-digitalis glycosides such as Oleandrin, digitoxin, and digoxin with reduced toxicity, high drug to lipid ratio, long circulating time in the blood stream and the ability to deliver the drug to tumor sites. In another aspect, the present invention provides an effective method to reduce the growth of cancers or reduce the incidence of metastases.

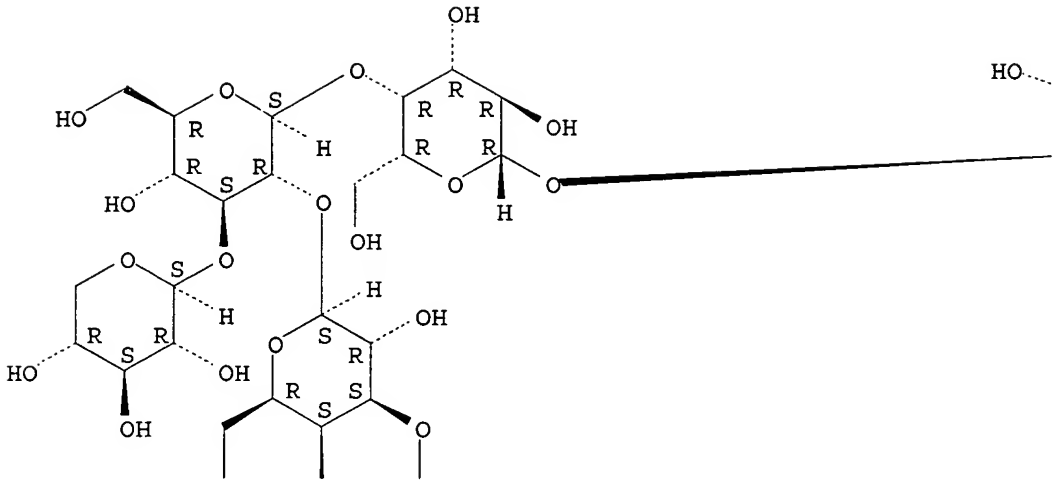
IT **11024-24-1**, Digitonin
(liposomal formulations of digitalis glycosides for treating cell-proliferative and other diseases)

RN 11024-24-1 HCAPLUS

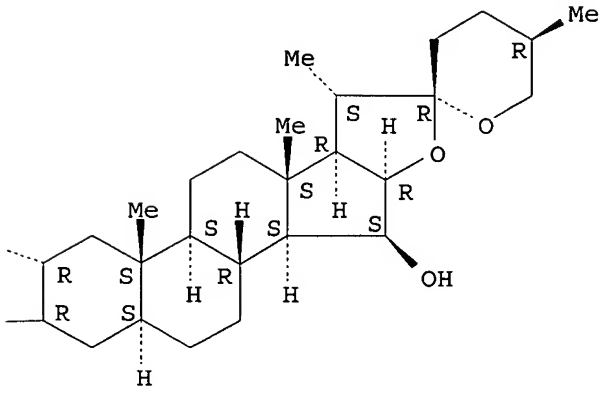
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

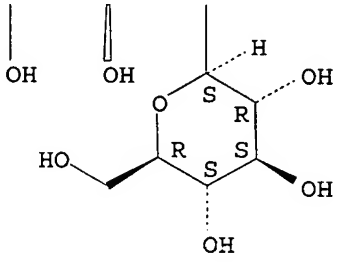
PAGE 1-A



PAGE 1-B



PAGE 2-A



IC ICM A61K031-704
ICS A61K009-127
INCL 514026000; 424450000
CC 63-6 (Pharmaceuticals)
IT 71-63-6, Digitoxin 124-99-2, Scillaren A 465-16-7, Oleandrin 465-90-7, Bufotalidin 466-06-8, Proscillaridin A 466-07-9 471-95-4, Bufotalin 507-59-5, Scillirosidin 507-60-8, Scilliroside 508-75-8, Convallatoxin 508-77-0, Cymarin 510-58-7, Scilliglaucoside 510-62-3, Scilliglaucosidin 560-54-3, Strophanthidol 560-67-8, Honghelin 562-21-0, Bufotalinin 630-60-4, Ouabain 1182-87-2, Peruvoside 1393-22-2, Scillaren B 1393-46-0, Thevetosin 1399-71-9, Helleborin 1405-76-1, Gitalin 1986-70-5, Calotropin 4562-36-1, Gitoxin 4589-95-1, Deacetyltanghinin 7044-33-9, Cheirotoxin 8002-01-5, Adonidin 9007-56-1, Echujin 11005-63-3, Strophanthin 11022-62-1, Glucobovoside A **11024-24-1**, Digitonin 11028-14-1, Bovoside A 11032-44-3, Bovoruboside 12708-27-9, Honghelose g 12738-19-1, Odoroside a 13137-64-9, Periplocin 13289-18-4, Hellebrin 13473-51-3, Convalloside 17179-38-3, Cheiroside a 17575-20-1, Lanatoside a 17575-21-2, Lanatoside b 17575-22-3, Lanatoside c 17651-61-5, Adonitoxin 18810-25-8, Odoroside h 20231-81-6, Uzarin 20830-75-5, Digoxin 21857-63-6, Scillirubrosidin 23604-99-1, Scillirubroside 23605-05-2, α-Antiarin 25390-16-3, Tanghinin 25395-32-8, Acetyl digitoxin 25633-33-4, Cerberin 27127-79-3, Thevetin b 28591-01-7 30685-43-9 31962-94-4, α Methyldigoxin 32476-67-8, Periplocymarin 37933-66-7, Thevetin a 38076-40-3, Nigrescin 51008-91-4, Acetyl oleandrin 98633-61-5, Sarmentocymarin 101329-50-4, Bryotoxin a 102694-24-6, Tyledoside A 102694-25-7, Tyledoside B 102694-26-8, Tyledoside D 102694-27-9, Tyledoside F 102694-28-0, Tyledoside G 102694-29-1, Tyledoside C 105608-31-9, Bryotoxin b 105608-32-0, Bryotoxin c 105801-16-9, Orbicuside A 105801-17-0, Orbicuside B 105822-21-7, Orbicuside C 110237-76-8, Rubellin 116988-19-3, Thesiuside 125339-13-1, Bryophyllin b 155023-39-5, Kalanchoside
(liposomal formulations of digitalis glycosides for treating cell-proliferative and other diseases)

L28 ANSWER 13 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:599400 HCAPLUS
DOCUMENT NUMBER: 140:104437
TITLE: Deaggregation behavior of saponin compounds
AUTHOR(S): Ji, Guo-Zhen; Zhang, Guang-Ming; Tang, Liang; Jiang, Xi-Kui
CORPORATE SOURCE: Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, 200032, Peop. Rep. China
SOURCE: Huaxue Xuebao (2003), 61(7), 970-975
CODEN: HHHPA4; ISSN: 0567-7351
PUBLISHER: Kexue Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The deaggregation behavior of saponin compds. was studied in Φ = 0.60 DX-H2O solution by fluorescence spectroscopy. The relationship of structure and deaggregating abilities of saponin compds. has been discussed. In comparison with the results of cell adhesion expts., the relationship of the deaggregating

abilities for saponin compds. with their biol. behavior has been discussed.

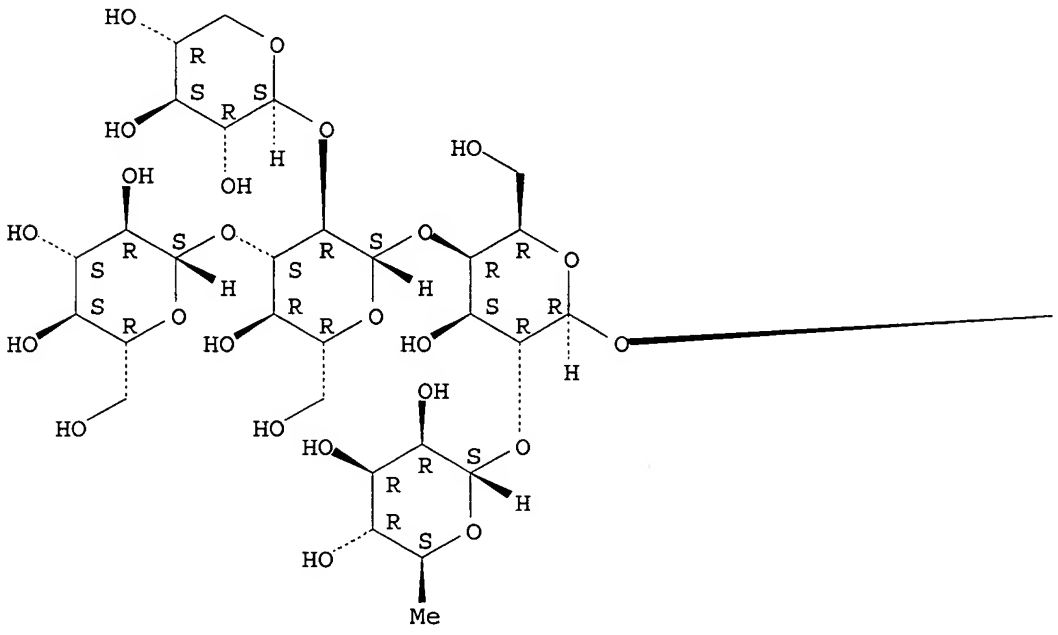
IT **646533-15-5**
(deaggregation behavior of saponin compds.)

RN 646533-15-5 HCAPLUS

CN β-D-Galactopyranoside, (3β,5α,25R)-spirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-[β-D-xylopyranosyl-(1→2)]-O-β-D-glucopyranosyl-(1→4)-O-[6-deoxy-α-L-mannopyranosyl-(1→2)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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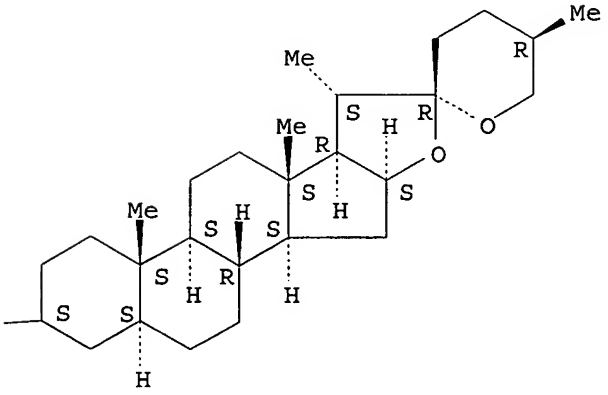


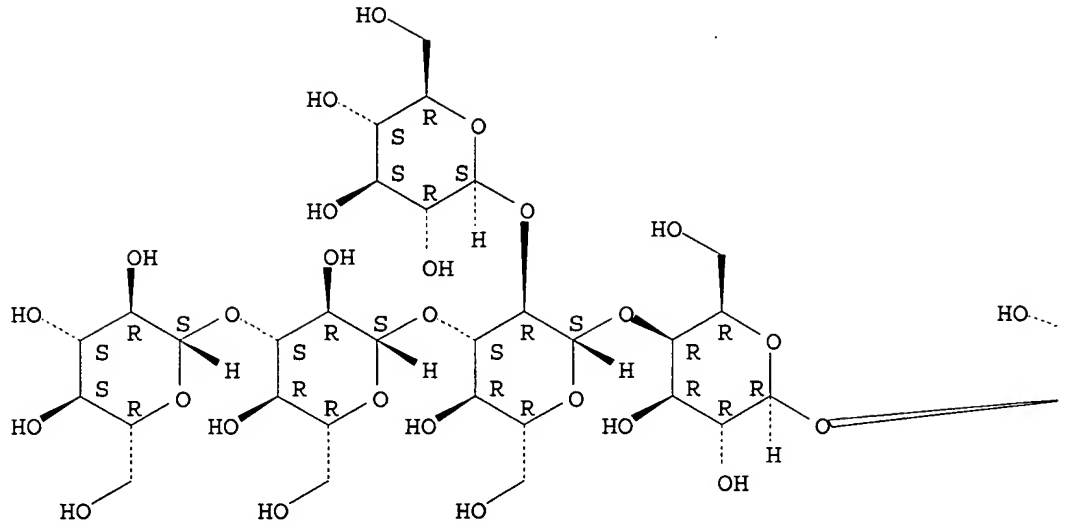
CC 1-3 (Pharmacology)

Section cross-reference(s): 33
IT 434-13-9, Lithocholic acid 1405-86-3, Glycyrrhizic acid 19057-60-4, Dioscine 20736-08-7, Saikosaponin C 20736-09-8, Saikosaponin A 42294-03-1, Glycyrrhizic acid monopotassium salt 155560-12-6 441017-81-8 646533-13-3 **646533-15-5** 646533-16-6 646533-17-7
(deaggregation behavior of saponin compds.)

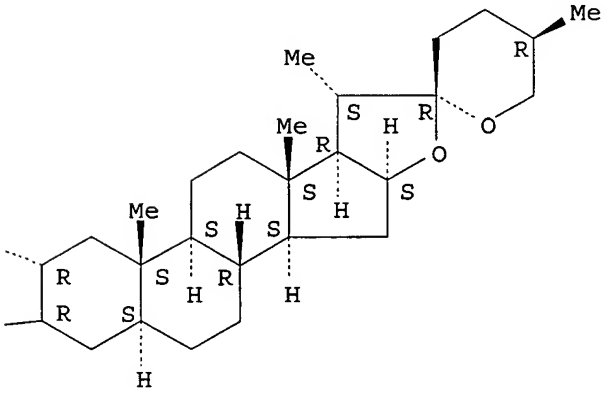
L28 ANSWER 14 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:302325 HCAPLUS
DOCUMENT NUMBER: 138:365413
TITLE: CAY-1, a novel antifungal compound from cayenne pepper
AUTHOR(S): Renault, S.; De Lucca, A. J.; Boue, S.; Bland, J. M.; Vigo, C. B.; Selitrennikoff, C. P.
CORPORATE SOURCE: MycoLogics, Inc., Aurora, CO, 80010, USA
SOURCE: Medical Mycology (2003), 41(1), 75-82
CODEN: MEMYFR; ISSN: 1369-3786
PUBLISHER: BIOS Scientific Publishers Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB CAY-1, a novel saponin from Capsicum frutescens (com. known as cayenne pepper) was investigated to determine its in vitro antifungal activity, mechanism of action and mammalian cell cytotoxicity. CAY-1 was active against 16 different fungal strains, including Candida spp. and Aspergillus fumigatus [min. inhibitory concns. (MIC) ranging from 4 to 16 μg ml-1], and was especially active against Cryptococcus neoformans (90% inhibition at 1 μg ml 1). Synergistic activity was also observed between CAY-1 and amphotericin B against Candida albicans and A. fumigatus. No significant cytotoxicity was demonstrated when CAY-1 was tested against 55 mammalian cell lines at up to 100 μg ml 1. Importantly, CAY-1 appears to act by disrupting the membrane integrity of fungal cells.
IT **318277-23-5P**, CAY 1
(in vitro antifungal activity of saponin CAY-1 from cayenne pepper and synergism with amphotericin B)
RN 318277-23-5 HCAPLUS
CN β-D-Galactopyranoside, (2α,3β,5α,25R)-2-hydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→2)-O-[O-β-D-glucopyranosyl-(1→3)-β-D-glucopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



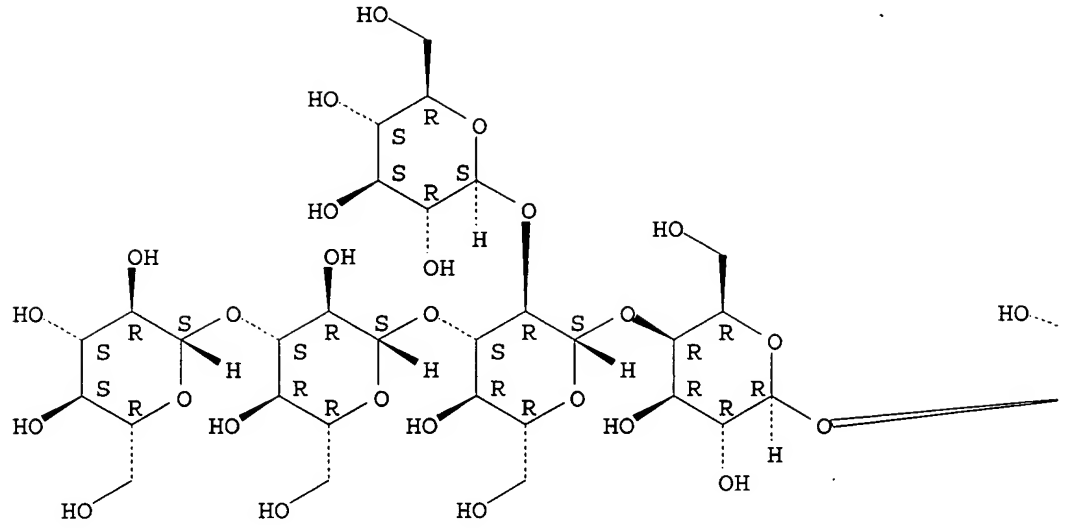
CC 10-5 (Microbial, Algal, and Fungal Biochemistry)
Section cross-reference(s): 63
IT **318277-23-5P**, CAY 1
(in vitro antifungal activity of saponin CAY-1 from cayenne pepper and synergism with amphotericin B)
REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 15 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:430096 HCAPLUS
DOCUMENT NUMBER: 138:32823
TITLE: CAY-1, a fungicidal saponin from Capsicum sp. fruit

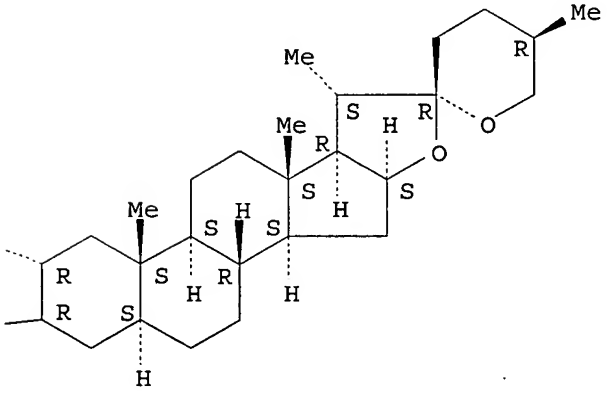
AUTHOR(S): De Lucca, A. J.; Bland, J. M.; Vigo, C. B.; Cushion, M.; Selitrennikoff, C. P.; Peter, J.; Walsh, T. J.
CORPORATE SOURCE: Southern Regional Research Center, Agricultural Research Service, US Department of Agriculture, New Orleans, LA, 70124, USA
SOURCE: Medical Mycology (2002), 40(2), 131-137
CODEN: MEMYFR; ISSN: 1369-3786
PUBLISHER: BIOS Scientific Publishers Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Saponins are steroidal or terpenoid-based glycosides with surface active properties. A steroidal saponin, CAY-1, with a mol. weight of 1243.35 Da, was isolated and purified to homogeneity from com. available dry, ground fruit of Capsicum frutescens. CAY-1 was shown to be a potent fungicide for the germinating conidia of Aspergillus flavus, A. fumigatus, A. parasiticus and A. niger with species-dependent LD90 values between 3 and 20 μM. Activity against some Aspergillus species was affected by the test medium used. In vitro assays, CAY-1 was effective against Pneumocystis carinii (IC50: 9.5 μM) and Candida albicans (IC90: 6.2 μM). CAY-1 had no effect on the viability of the nongerminating conidia of the two filamentous fungi, P. carinii and C. albicans, nor on the conidial type of Fusarium oxysporum. It was ineffective against the bacteria Enterobacter agglomerans, Bacillus subtilis, Escherichia coli and Staphylococcus aureus. CAY-1 was not cytotoxic to A 549 lung carcinoma cells or HeLa cells at effective fungicidal concns. The results indicate that CAY-1 is an effective fungicide for Aspergillus species, C. albicans and P. carinii at concns. below the threshold for mammalian cell toxicity.
IT **318277-23-5P**, CAY-1
(fungicidal effects of CAY-1 saponin from Capsicum sp. fruit)
RN 318277-23-5 HCAPLUS
CN β-D-Galactopyranoside, (2α,3β,5α,25R)-2-hydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→2)-O-[O-β-D-glucopyranosyl-(1→3)-β-D-glucopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



CC 1-5 (Pharmacology)
IT **318277-23-5P**, CAY-1
(fungicidal effects of CAY-1 saponin from Capsicum sp. fruit)
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 16 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:133839 HCAPLUS
DOCUMENT NUMBER: 136:268029
TITLE: Shock wave-mediated molecular delivery into cells
AUTHOR(S): Kodama, Tetsuya; Doukas, Apostolos G.; Hamblin, Michael R.

CORPORATE SOURCE: BAR314B, Wellman Laboratories of Photomedicine, and Department of Dermatology, Massachusetts General Hosptial, Harvard Medical School, Boston, MA, 02114, USA
SOURCE: Biochimica et Biophysica Acta, Molecular Cell Research (2002), 1542(1-3), 186-194
CODEN: BBAMCO; ISSN: 0167-4889
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A single shock wave generated by a shock tube is able to effectively deliver macromols. such as fluorescein isothiocyanate-dextran into the cytoplasm of living cells without causing cytotoxicity. We report on the effect of varying the mol. weight of the dextran and the number of shock waves on the efficiency of delivery into a cancer cell line. The fraction of cells permeabilized and the total fluorescence delivered were measured by flow cytometry, and the cellular viability by a tetrazolium assay on adherent cells and these values were compared to cell permeabilization using digitonin. Shock waves can deliver mols. of up to 2000000 mol. weight into the cytoplasm of cells without toxicity and may have applications in gene therapy.

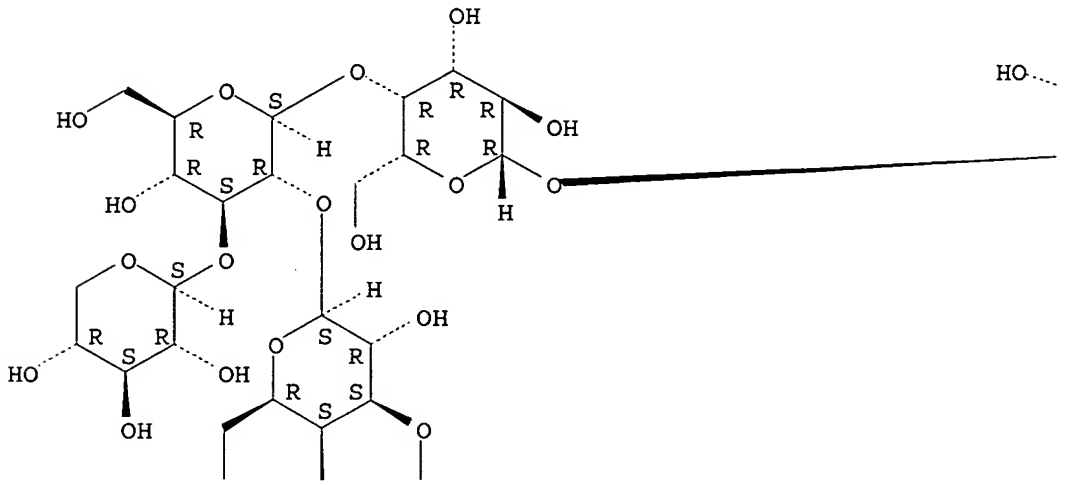
IT **11024-24-1**, Digitonin
(shock wave-mediated mol. delivery into cells)

RN 11024-24-1 HCAPLUS

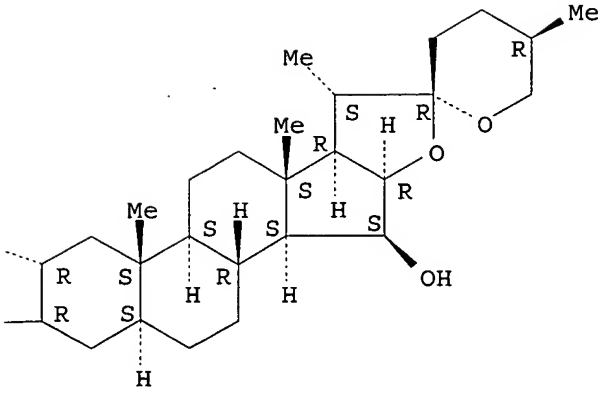
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

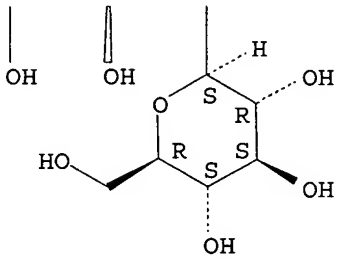
PAGE 1-A



PAGE 1-B



PAGE 2-A



CC 63-5 (Pharmaceuticals)
IT **11024-24-1**, Digitonin 60842-46-8, FITC-dextran
(shock wave-mediated mol. delivery into cells)
REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 17 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:879761 HCAPLUS
DOCUMENT NUMBER: 136:144856
TITLE: Two steroidal saponins from Camassia cusickii induce L1210 cell death through the apoptotic mechanism
AUTHOR(S): Candra, Ellyawati; Matsunaga, Kimihiro; Fujiwara, Hironori; Mimaki, Yoshihiro; Sashida, Yutaka; Yamakuni, Tohru; Ohizumi, Yasushi
CORPORATE SOURCE: Department of Pharmaceutical Molecular Biology, Graduate School of Pharmaceutical Sciences, Tohoku University, Sendai, 980-8578, Japan
SOURCE: Canadian Journal of Physiology and Pharmacology (2001), 79(11), 953-958
CODEN: CJPPA3; ISSN: 0008-4212
PUBLISHER: National Research Council of Canada
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Two steroidal saponins, tigogenin hexasaccharide-1 (TGHS-1, (25R)-5α-spirostan-3β-yl-4-O-[2-O-[3-O-(α-L-rhamnopyranosyl)-β-D-glucopyranosyl]-3-O-[4-O-(α-L-rhamnopyranosyl)-β-D-glucopyranosyl]-β-D-glucopyranosyl]-β-D-galactopyranoside) and tigogenin hexasaccharide-2 (TGHS-2, (25R)-5α-spirostan-3β-yl-4-O-[2-O-[3-O-(β-D-glucopyranosyl)-β-D-glucopyranosyl]-3-O-[4-O-(α-L-rhamnopyranosyl)-β-D-glucopyranosyl]-β-D-glucopyranosyl]-β-D-galactopyranoside), were isolated from the fresh bulbs of Camassia cusickii. In murine leukemic L1210 cells, both compds. showed cytotoxicity with an EC50 value of 0.06 μM. The morphol. observation revealed that TGHS-1 and TGHS-2 induced shrinkage in cell soma and chromatin condensation, suggesting apoptotic cell death. The cell death was confirmed to be apoptosis by Annexin V binding to phosphatidylserine in the cell membrane and excluding propidium iodide. A typical apoptotic DNA ladder and the cleavage of caspase-3 were observed after treatment with TGHS-1 and TGHS-2. In the presence of both the compds., cells with sub-G1 DNA content were detected by flow cytometric anal., indicating that TGHS-1 and TGHS-2 (each EC50 value of 0.1 μM) are the most powerful apoptotic saponins known. These results suggest that TGHS-1 and TGHS-2 induce apoptotic cell death through caspase-3 activation.

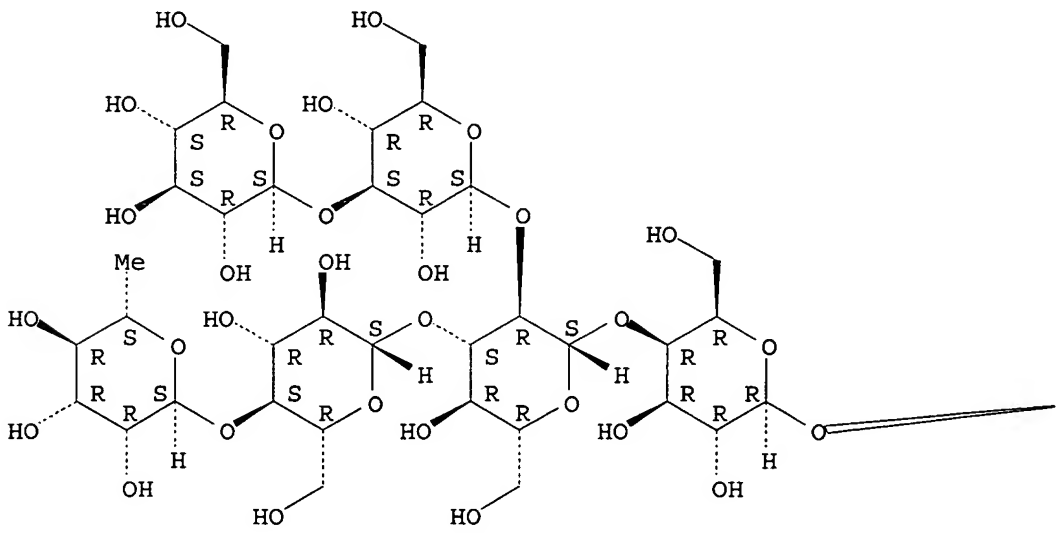
IT **112516-09-3P 140674-52-8P**
(two steroidal saponins from Camassia cusickii induce L1210 cell death through apoptotic mechanism)

RN 112516-09-3 HCAPLUS

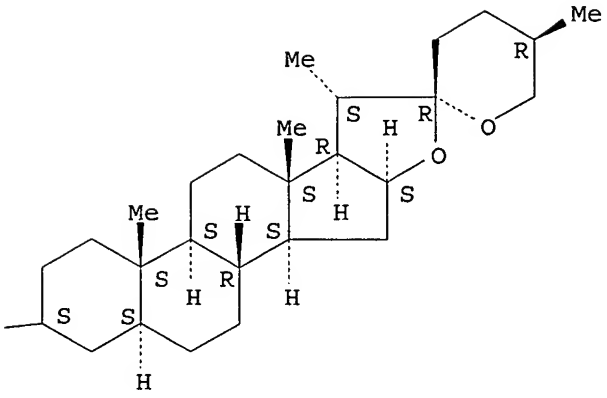
CN β-D-Galactopyranoside, (3β,5α,25R)-spirostan-3-yl O-6-deoxy-α-L-mannopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→3)-O-[O-β-D-glucopyranosyl-(1→3)-β-D-glucopyranosyl-(1→2)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A

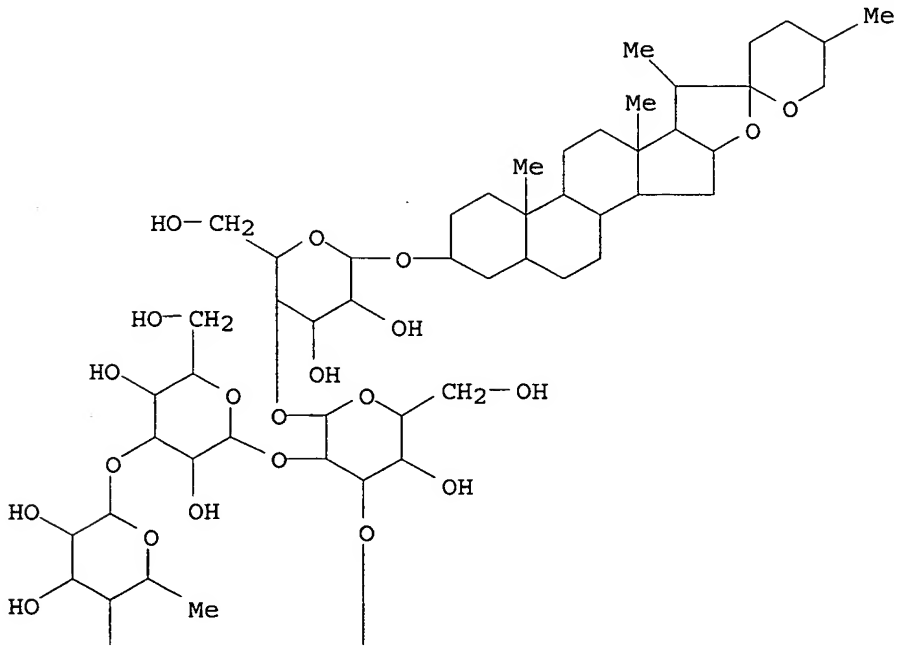


PAGE 1-B

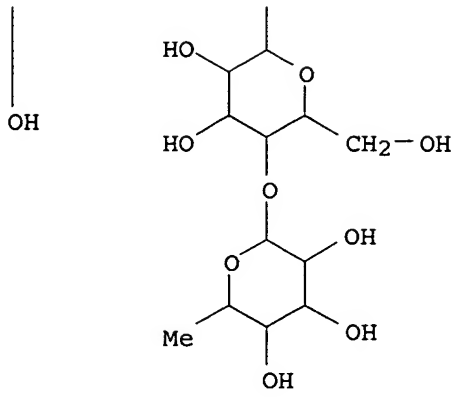


RN 140674-52-8 HCAPLUS
CN β-D-Galactopyranoside, (3β,25R)-spirostan-3-yl O-6-deoxy-α-L-mannopyranosyl-(1→3)-O-β-D-glucopyranosyl-(1→2)-O-[O-6-deoxy-α-L-mannopyranosyl-(1→4)-β-D-glucopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



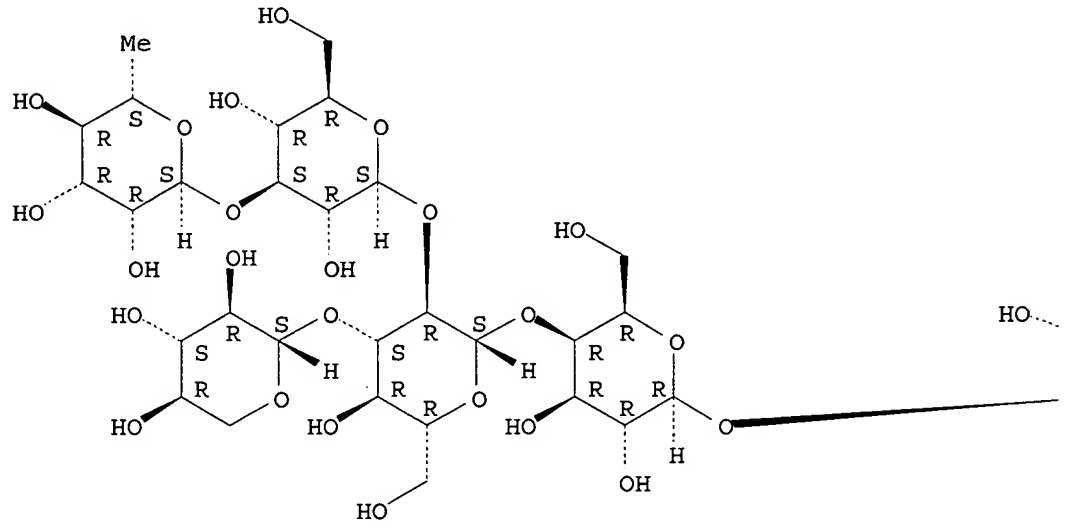
CC 1-6 (Pharmacology)
Section cross-reference(s): 11
IT **112516-09-3P 140674-52-8P**
(two steroidal saponins from Camassia cusickii induce L1210 cell death through apoptotic mechanism)
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 18 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:812404 HCAPLUS
DOCUMENT NUMBER: 136:128581
TITLE: Cytotoxic activities and structure-cytotoxic relationships of steroidal saponins
AUTHOR(S): Mimaki, Yoshihiro; Yokosuka, Akihito; Kuroda, Minpei; Sashida, Yutaka
CORPORATE SOURCE: Laboratory of Medicinal Plant Science, School of Pharmacy, Tokyo University of Pharmacy and Life Science, Tokyo, 192-0392, Japan
SOURCE: Biological & Pharmaceutical Bulletin (2001), 24(11), 1286-1289
CODEN: BPBLEO; ISSN: 0918-6158
PUBLISHER: Pharmaceutical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 136:128581
AB We have systematically examined the cytotoxic activities of the steroidal saponins mainly isolated from the Liliaceae plants against HL-60 human promyelocytic leukemia cells and found several structure-activity relationships. Some steroidal saponins evaluated in the assay system showed considerable cytotoxic activities, which were almost as potent as that of etoposide used as a pos. control. The activities were sensitive to the monosaccharides constituting the sugar moieties and their sequences, as well as to the structures of the aglycons.
IT **164592-95-4 164592-97-6**
(antitumor structure-activity relationships of steroidal saponins)
RN 164592-95-4 HCAPLUS
CN β-D-Galactopyranoside, (2α,3β,5α,25R)-2-hydroxyspirostan-3-yl O-6-deoxy-α-L-mannopyranosyl-(1→3)-O-β-D-glucopyranosyl-(1→2)-O-[β-D-

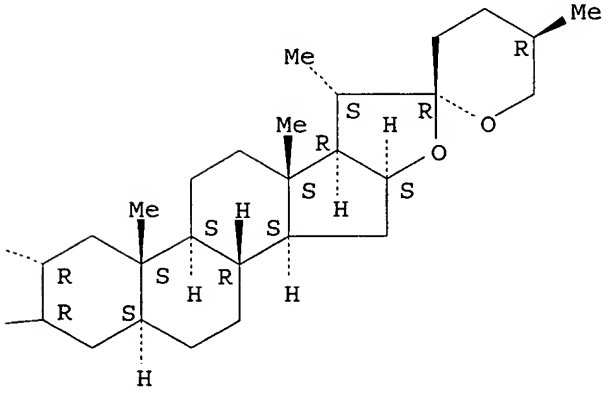
xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A



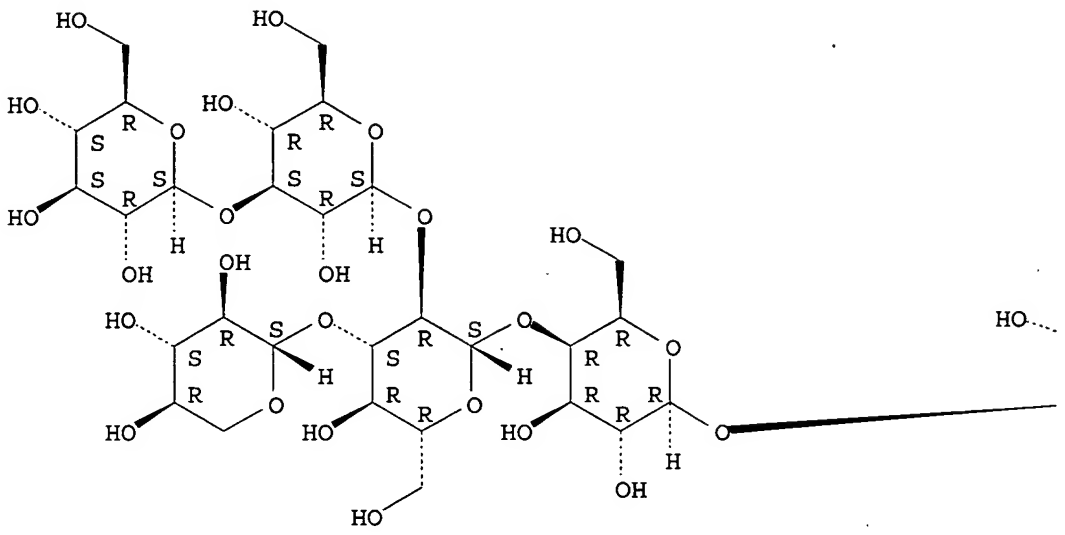
PAGE 1-B



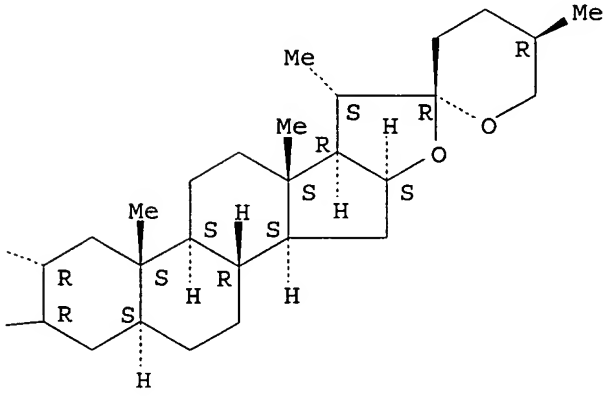
RN 164592-97-6 HCAPLUS
CN β-D-Galactopyranoside, (2α,3β,5α,25R)-2-hydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-glucopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



CC 1-3 (Pharmacology)
Section cross-reference(s): 32

IT 14144-06-0 19057-67-1 19083-00-2 28591-01-7 39491-37-7
39491-41-3 50773-41-6 54522-52-0 55659-75-1 55916-51-3
61478-50-0 70880-60-3 73069-20-2 81917-50-2 84774-05-0
87425-35-2 90308-85-3 129744-09-8 132922-48-6 132922-50-0
145594-56-5 145594-57-6 163136-07-0 163136-28-5
164592-95-4 **164592-97-6** 164714-18-5
164800-28-6 180161-85-7 184885-30-1 205191-12-4
211036-50-9 211059-91-5 211059-92-6 219296-09-0
227004-26-4 227004-32-2 227004-34-4 227004-36-6
227004-39-9 256642-48-5 256650-98-3 391899-79-9
(antitumor structure-activity relationships of steroidal saponins)

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 19 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:676989 HCAPLUS
DOCUMENT NUMBER: 135:238587
TITLE: Rapid and sensitive plate method for detection of Aspergillus fumigatus by determining arabinopyranoside substrate-cleaving activity
INVENTOR(S): Nelis, Hans J.; Bauters, Tiene G. M.
PATENT ASSIGNEE(S): Universiteit Gent, Belg.
SOURCE: PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001066790	A2	20010913	WO 2001-EP2727	2001 0312
WO 2001066790	A3	20020328		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1132481	A1	20010912	EP 2000-870041	2000 0310
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.:		
EP 2000-870041	A	2000 0310
US 2000-194823P	P	2000 0405

AB The present invention is based on the finding that micro-organisms can be detected and identified on the basis of a specific enzyme activity present in the micro-organism to be detected. Methods and kits are described for the detection of micro-organisms, preferably fungal species, using an arabinopyranoside substrate for determining arabinopyranoside-cleaving activity. More particularly methods and kits are described for the specific, sensitive and rapid detection of Aspergillus fumigatus for diagnostic purposes. A selective enriched growth medium for fungi is also provided.
IT **11024-24-1**, Digitonin

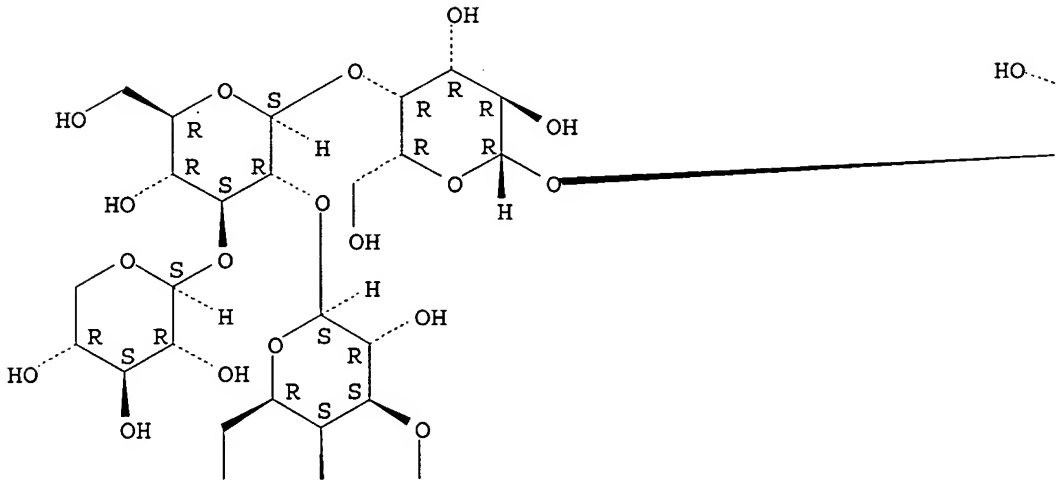
(membrane permeabilizer; rapid and sensitive plate method for detection of Aspergillus fumigatus by determining arabinopyranoside substrate-cleaving activity)

RN 11024-24-1 HCAPLUS

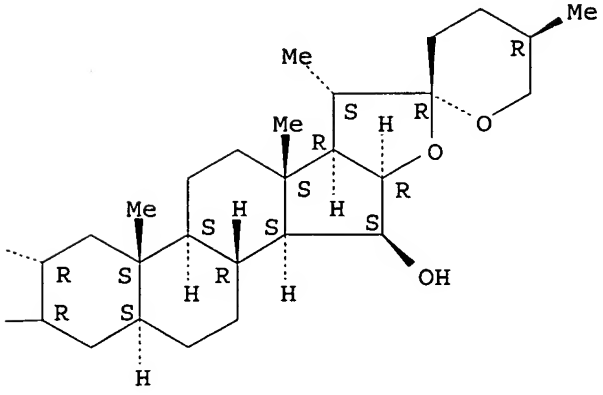
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

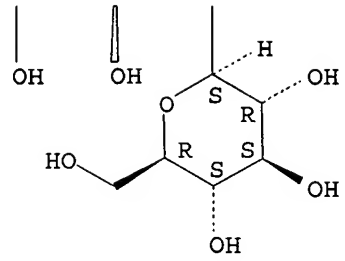
PAGE 1-A



PAGE 1-B



PAGE 2-A



IC ICM C12Q001-04
ICS C12Q001-34; C12Q001-44
CC 7-1 (Enzymes)
Section cross-reference(s): 9, 14
IT 67-66-3, Chloroform, biological studies 67-68-5, DMSO, biological studies 71-41-0, Amyl alcohol, biological studies 108-88-3, Toluene, biological studies 1397-89-3, Amphotericin B 7631-98-3, Sodium lauryl sarcosinate **11024-24-1**, Digitonin
(membrane permeabilizer; rapid and sensitive plate method for detection of Aspergillus fumigatus by determining arabinopyranoside substrate-cleaving activity)

L28 ANSWER 20 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:549324 HCAPLUS
DOCUMENT NUMBER: 135:313155
TITLE: Cytotoxicity of digitoxin and related cardiac glycosides in human tumor cells
AUTHOR(S): Johansson, Senia; Lindholm, Petra; Gullbo, Joachim; Larsson, Rolf; Bohlin, Lars; Claeson, Per
CORPORATE SOURCE: Division of Pharmacognosy, Department of Medicinal Chemistry, Biomedical Centre, Uppsala University, Uppsala, 751 23, Swed.
SOURCE: Anti-Cancer Drugs (2001), 12(5), 475-483
CODEN: ANTDEV; ISSN: 0959-4973
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The saponin digitonin, the aglycon digitoxigenin and five cardiac glycosides were evaluated for cytotoxicity using primary cultures of tumor cells from patients and a human cell line panel (representing different cytotoxic drug-resistance patterns). Of these seven compds., proscillaridin A was the most potent (IC50: 6.4-76 nM), followed by digitoxin, and then ouabain, digoxin, lanatoside C, digitoxigenin and digitonin. Correlation anal. of the log IC50 values for the cell lines in the panel showed that compound cytotoxicity was only slightly influenced by resistance mechanisms that involved P-glycoprotein, topoisomerase II, multidrug resistance-associated protein and glutathione-mediated drug resistance. Digitoxin and digoxin expressed selective toxicity against solid tumor cells from patients, while proscillaridin A expressed no selective toxicity against either solid or hematol. tumor cells. The results revealed marked differences in cytotoxicity between the cardiac glycosides, both in potency and selectivity, and modes of action for cytotoxicity that differ from that of commonly used anticancer drugs.
IT **11024-24-1**, Digitonin

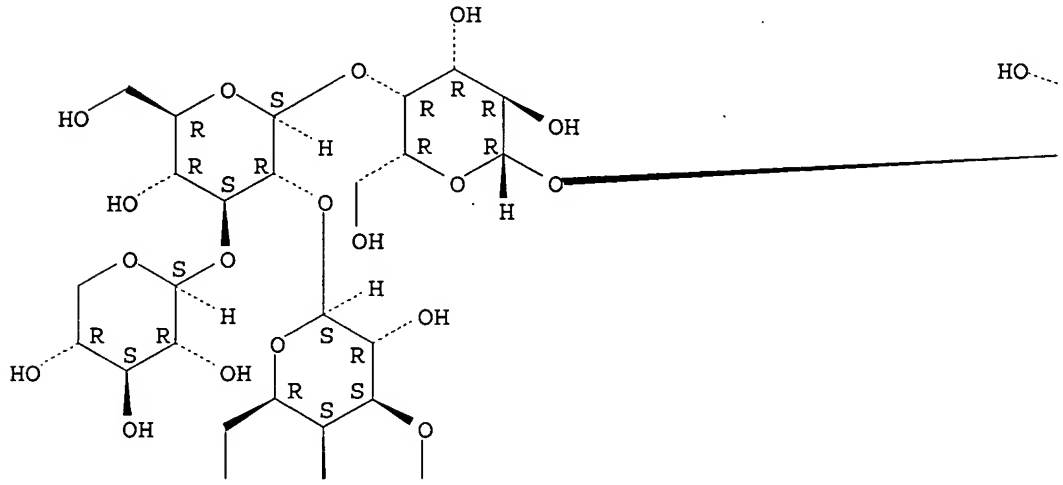
(cytotoxicity of digitoxin and related cardiac glycosides in human tumor cells)

RN 11024-24-1 HCAPLUS

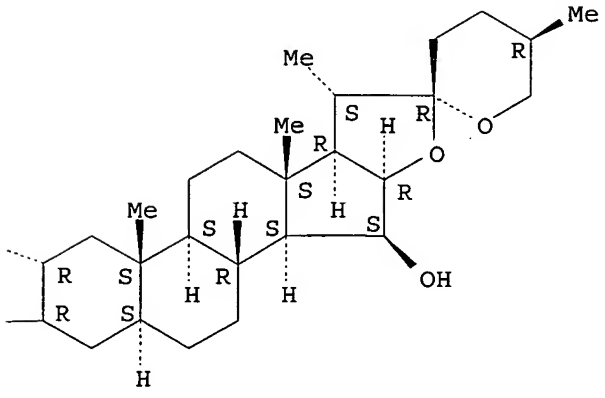
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25 R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

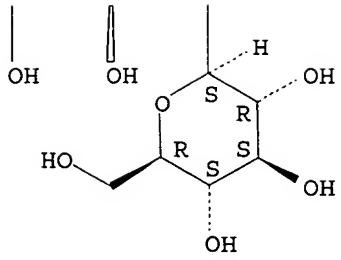
PAGE 1-A



PAGE 1-B



PAGE 2-A



CC 1-3 (Pharmacology)
IT 71-63-6, Digitoxin 143-62-4, Digitoxigenin 466-06-8, Proscillaridin A 630-60-4, Ouabain **11024-24-1**, Digitonin 17575-22-3, Lanatoside C 20830-75-5, Digoxin
(cytotoxicity of digitoxin and related cardiac glycosides in human tumor cells)
REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 21 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:519341 HCAPLUS
DOCUMENT NUMBER: 135:91861
TITLE: Method of preparing and using isoflavones
INVENTOR(S): Empie, Mark; Gugger, Eric
PATENT ASSIGNEE(S): Archer Daniels Midland Co., USA
SOURCE: U.S., 8 pp., Cont.-in-part of U.S. 6,033,714.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6261565	B1	20010717	US 1998-162038	1998 0928
US 5702752	A	19971230	US 1996-614545	1996 0313
IL 130611	A1	20010430	IL 1997-130611	1997 0310
US 5792503	A	19980811	US 1997-868629	1997 0604
US 6033714	A	20000307	US 1998-35588	1998 0305
AU 9887879	A1	19990422	AU 1998-87879	1998 1001
AU 748832	B2	20020613		
ZA 9808962	A	19990913	ZA 1998-8962	1998

1001

NZ 332131 A 20010629 NZ 1998-332131

1998

1001

CA 2249501 C 20030114 CA 1998-2249501

1998

1001

EP 906761 A2 19990407 EP 1998-308060

1998

1002

EP 906761 A3 19990519

EP 906761 B1 20040714

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 11221048 A2 19990817 JP 1998-296187

1998

1002

MX 9808146 A 20001031 MX 1998-8146

1998

1002

AT 270894 E 20040715 AT 1998-308060

1998

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EP 1466609 A1 20041013 EP 2004-15530

1998

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY

PT 906761 T 20041130 PT 1998-308060

1998

1002

ES 2224337 T3 20050301 ES 1998-308060

1998

1002

HK 1016879 A1 20050422 HK 1999-101886

1999

0427

US 6391308 B1 20020521 US 2000-615239

2000

0713

US 6391309 B1 20020521 US 2000-615240

2000

0713

US 6391310 B1 20020521 US 2000-616205

2000

0713

US 6395279 B1 20020528 US 2000-616150

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0713

US 6399072 B1 20020604 US 2000-615152

2000

0713

US 2002168433 A1 20021114 US 2002-136103

2002

0501

US 2002187211 A1 20021212 US 2002-136158

2002

0501

US 6509381 B2 20030121

US 2003003168 A1 20030102 US 2002-137490

					2002 0501
US 6900240	B2	20050531			
US 6518319	B1	20030211	US 2002-136150		
					2002 0501
US 2003064938	A1	20030403	US 2002-136079		
					2002 0501
PRIORITY APPLN. INFO.:			US 1996-614545	A3	
					1996 0313
			US 1997-868629	A2	
					1997 0604
			US 1997-60549P	P	
					1997 1002
			US 1998-35588	A2	
					1998 0305
			IL 1997-120409	A3	
					1997 0310
			US 1998-162038	A	
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			US 1998-162038P	P	
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					1998 1002
			US 2000-615152	A3	
					2000 0713
			US 2000-615239	A3	
					2000 0713
			US 2000-615240	A3	
					2000 0713
			US 2000-616150	A3	
					2000 0713
			US 2000-616205	A3	
					2000 0713

AB The invention provides for a refinement of phytochems. in order to tailor the refined end product to particular human dietary needs. More particularly, a composition is prepared by extracting phytochems. from plant matter. This composition is enriched preferably in two or more isoflavones, lignans, saponins, catechins and phenolic acids. Soy is the preferred source of these chems.; however, other plants may also be used, such as red clover, kudzu, flax, and cocoa. The composition is a dietary supplement for treatment of various cancers, pre-and-post-menstrual syndromes, and various other disorders.

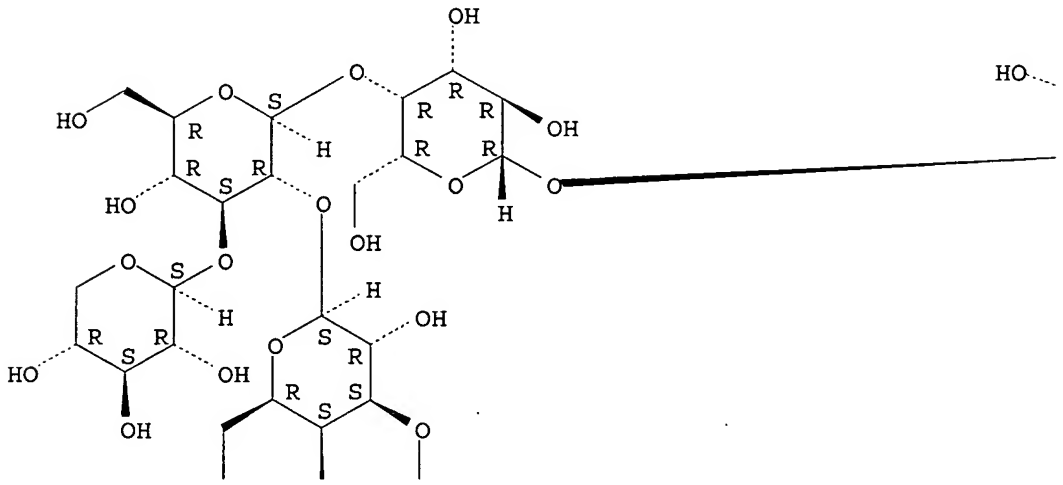
IT **11024-24-1**, Digitonin
(isoflavone preparing method and use)

RN 11024-24-1 HCAPLUS

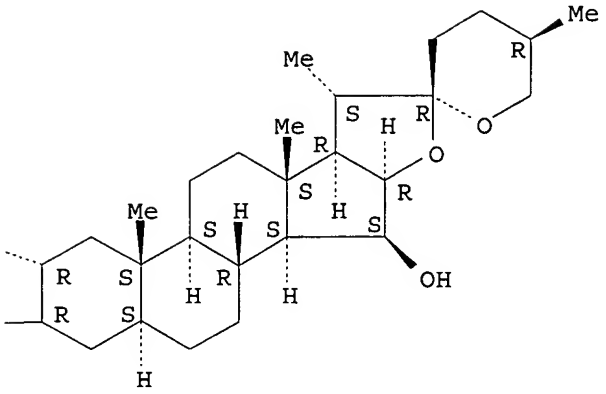
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



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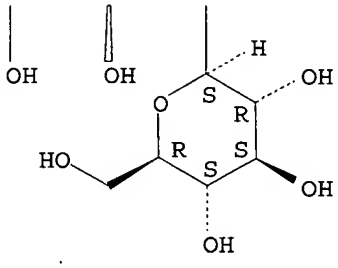


IC ICM A01N065-00
INCL 424195100
CC 17-4 (Food and Feed Chemistry)
Section cross-reference(s): 18, 63
IT 69-72-7, Salicylic acid, biological studies 121-34-6, Vanillic acid 149-91-7, Gallic acid, biological studies 156-38-7 327-97-9, Chlorogenic acid 331-39-5, Caffeic acid 446-72-0, Genistein 465-99-6, Hederagenin 485-72-3, Formononetin 486-66-8, Daidzein 487-36-5, Pinoresinol 490-46-0, Epicatechin 490-79-9 491-80-5, Biochanin A 500-38-9, Nordihydroguaiaretic acid 508-01-0, Soyasapogenol A 530-57-4, Syringic acid 530-59-6, Sinapic acid 548-29-8, Isolariciresinol 580-72-3, Matairesinol 595-14-2, Soyasapogenol C 595-15-3, Soyasapogenol B 599-07-5, Medicagenic acid 621-82-9, Cinnamic acid, biological studies 970-73-0, Gallocatechin 970-74-1, Epigallocatechin 1135-24-6, Ferulic acid 1393-03-9, Quillaja saponin 1405-86-3, Glycyrrhizin 2955-23-9, Olivil 6750-59-0, Soyasapogenol E **11024-24-1**, Digitonin 17406-45-0, Tomatine 25429-38-3, Coumaric acid 27003-73-2, Lariciresinol 29388-59-8, Secoisolariciresinol 29656-58-4, Hydroxybenzoic acid 40957-83-3, Glycitein 56283-67-1, Lucernic acid 65892-76-4, Soyasapogenol D 84161-89-7, Zanhic acid 104033-83-2, Soyasapogenol F
(isoflavone preparing method and use)
REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 22 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:447038 HCAPLUS
DOCUMENT NUMBER: 136:210132
TITLE: Cytotoxic activity of saponins from Camassia leichtlinii against human oral tumor cell lines
AUTHOR(S): Furuya, Shigenori; Takayama, Fumitoshi; Mimaki, Yoshihiro; Sashida, Yutaka; Satoh, Kazue; Sakagami, Hiroshi
CORPORATE SOURCE: Department of Dental Pharmacology, Meikai University School of Dentistry, Saitama, 350-0283, Japan
SOURCE: Anticancer Research (2001), 21(2A), 959-964
CODEN: ANTRD4; ISSN: 0250-7005
PUBLISHER: International Institute of Anticancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English

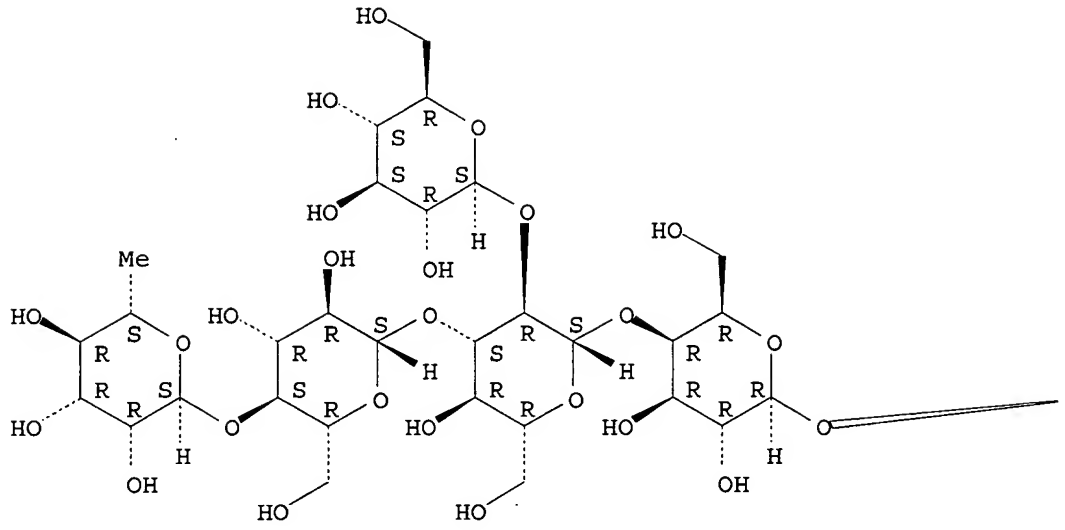
AB Five steroidal saponins from C. leichtlinii showed higher cytotoxicity against human oral squamous cell carcinoma cells HSC-2 than against normal human gingival fibroblasts HGF. The tumor specificity of the saponins varied considerably from sample to sample but was generally higher than that of tannins, flavonoids and prenylated compds. such as geranylgeraniol and vitamin K2. Agarose gel electrophoresis showed that the saponins failed to induce internucleosomal DNA fragmentation but produced large DNA fragments in HSC-2 cells, whereas two of the compds. induced internucleosomal DNA fragmentation in human promyelocytic leukemic HL-60 cells. In contrast to the cytotoxic activity of epigallocatechin gallate or gallic acid, that of the saponins was not significantly affected by metals (Co2+, Cu2+, Fe3+) or by antioxidants (sodium ascorbate, N-acetyl-L-cysteine, catalase). Furthermore, the saponins did not produce radicals (detected by ESR spectroscopy) or oxidation potentials (measured by NO monitoring). These data suggest that an oxidation-mediated mechanism is not involved in the cytotoxicity of the steroidal saponins.

IT **112516-08-2 354575-42-1 402483-27-6 402483-28-7**
(cytotoxic activity of saponins from Camassia leichtlinii against human oral tumor cell lines)

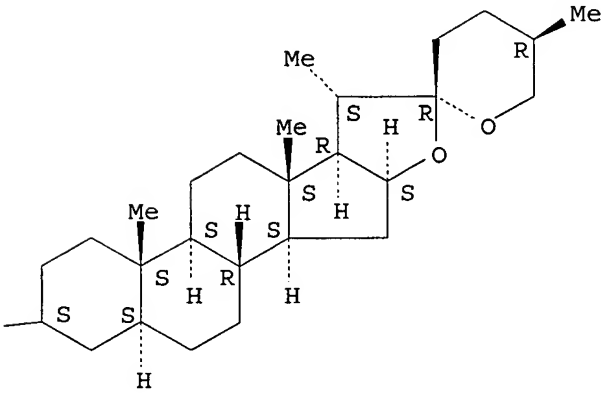
RN 112516-08-2 HCAPLUS
CN β-D-Galactopyranoside, (3β,5α,25R)-spirostan-3-yl O-6-deoxy-α-L-mannopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→3)-O-[β-D-glucopyranosyl-(1→2)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A



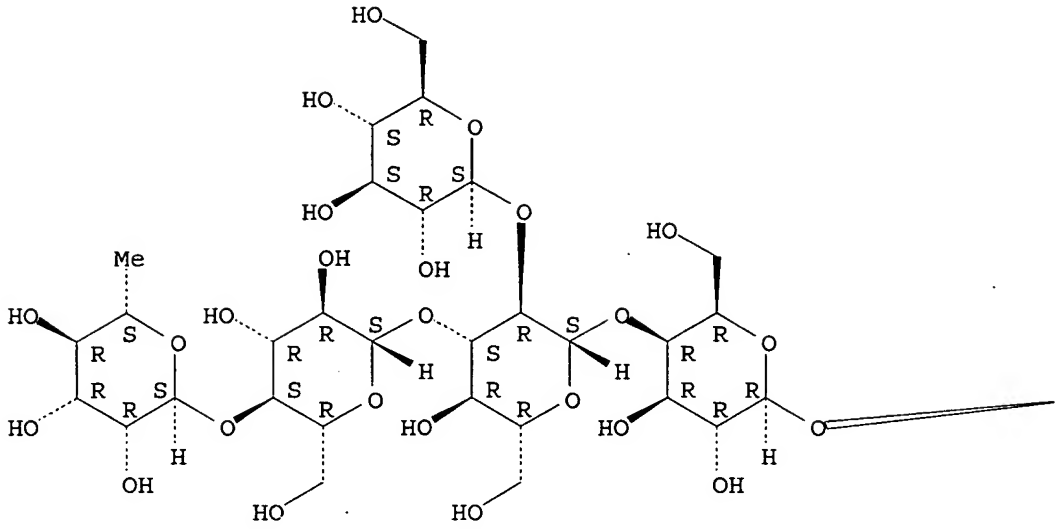
PAGE 1-B



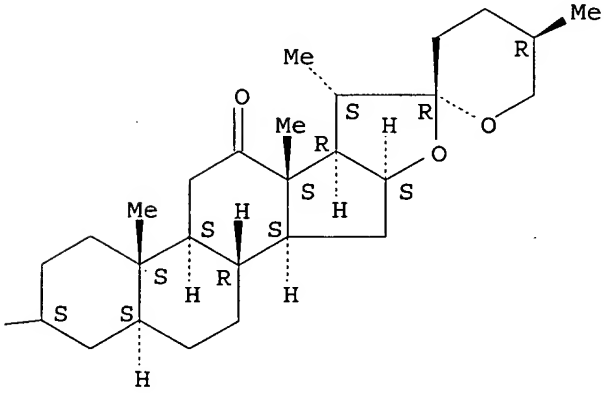
RN 354575-42-1 HCAPLUS
CN Spirostan-12-one, 3-[(O-6-deoxy-α-L-mannopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→3)-O-[β-D-glucopyranosyl-(1→2)]-O-β-D-glucopyranosyl-(1→4)-β-D-galactopyranosyl)oxy]-, (3β,5α,25R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A



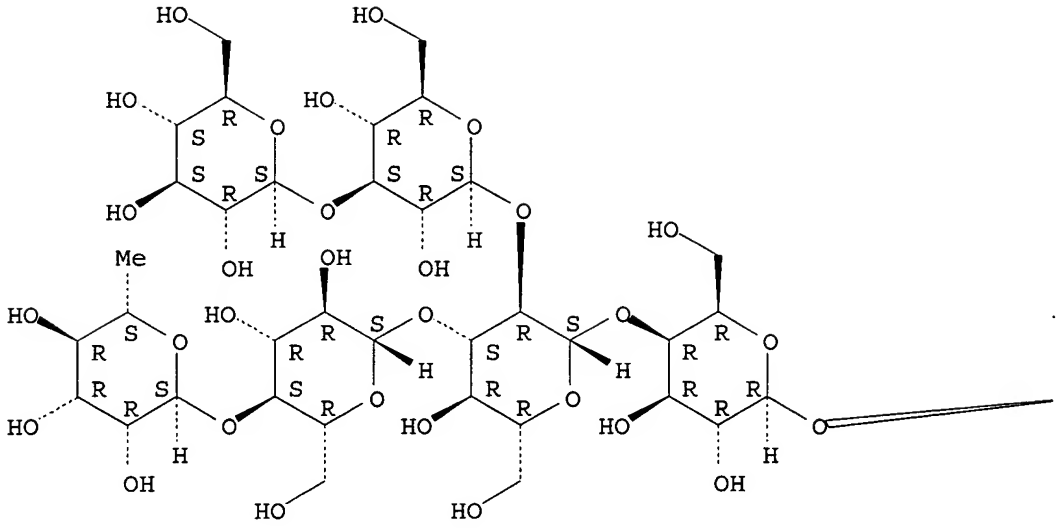
PAGE 1-B



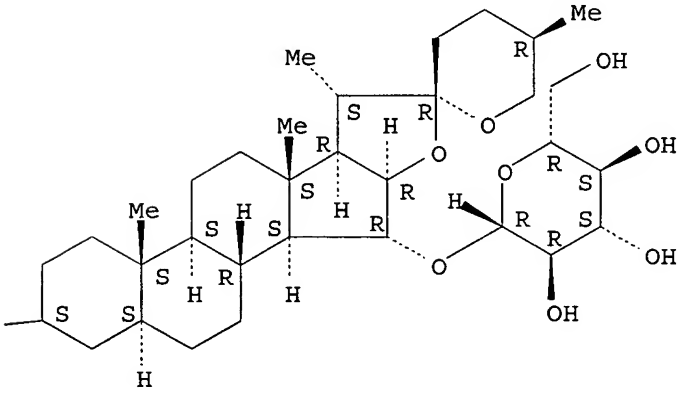
RN 402483-27-6 HCAPLUS
CN β-D-Galactopyranoside, (3β,5α,15α,25R)-15-(β-D-glucopyranosyloxy)spirostan-3-yl O-6-deoxy-α-L-mannopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→3)-O-[O-β-D-glucopyranosyl-(1→3)-β-D-glucopyranosyl-(1→2)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



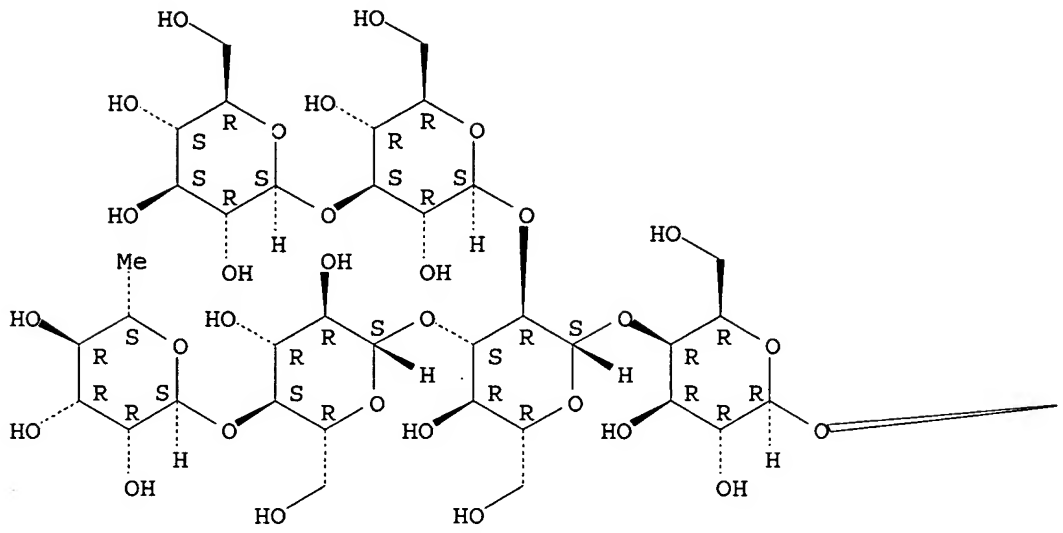
PAGE 1-B



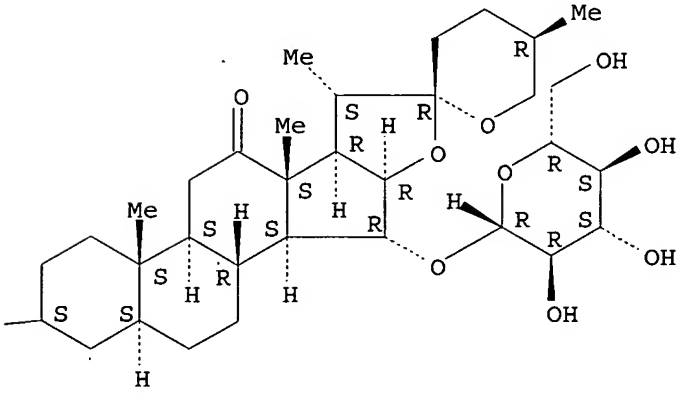
RN 402483-28-7 HCAPLUS
CN Spirostan-12-one, 3-[(O-6-deoxy-α-L-mannopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→3)-O-[O-β-D-glucopyranosyl-(1→3)-β-D-glucopyranosyl-(1→2)]-O-β-D-glucopyranosyl-(1→4)-β-D-galactopyranosyl)oxy]-15-(β-D-glucopyranosyloxy)-, (3β,5α,15α,25R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



CC 1-6 (Pharmacology)
Section cross-reference(s): 11
IT **112516-08-2 354575-42-1 402483-27-6**
402483-28-7 402483-29-8
(cytotoxic activity of saponins from Camassia leichtlinii against human oral tumor cell lines)
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 23 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:420943 HCAPLUS
DOCUMENT NUMBER: 136:205288
TITLE: Method of obtaining digitonin from Digitalis

seeds
AUTHOR(S): Kemertelidze, E. P.; Sulakvelidze, Ts. P.
CORPORATE SOURCE: I. G. Kutateladze Inst. Pharmacochemistry, Georgian Academy of Sciences, Tbilisi, Georgia
SOURCE: Khimiya Prirodnykh Soedinenii (1992), (5), 587-588
CODEN: KPSUAR; ISSN: 0023-1150
PUBLISHER: Izdatel'stvo Fan
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB The ground Digitalis seeds were defatted with petroleum ether or dichloroethane and the glycosides were extracted with 80% alc. The extract was concentrated to 1/3 volume, and a small amount of a 1:2 mixture of carbon tetrachloride and isopropanol was added. The resulting mixture was left overnight at room temperature for digitonin to crystallize. The digitonin crystals were separated, recrystd. and dried. Approx. 50% of the amount of digitonin present in the raw material was isolated, i.e., 2-2.2%.

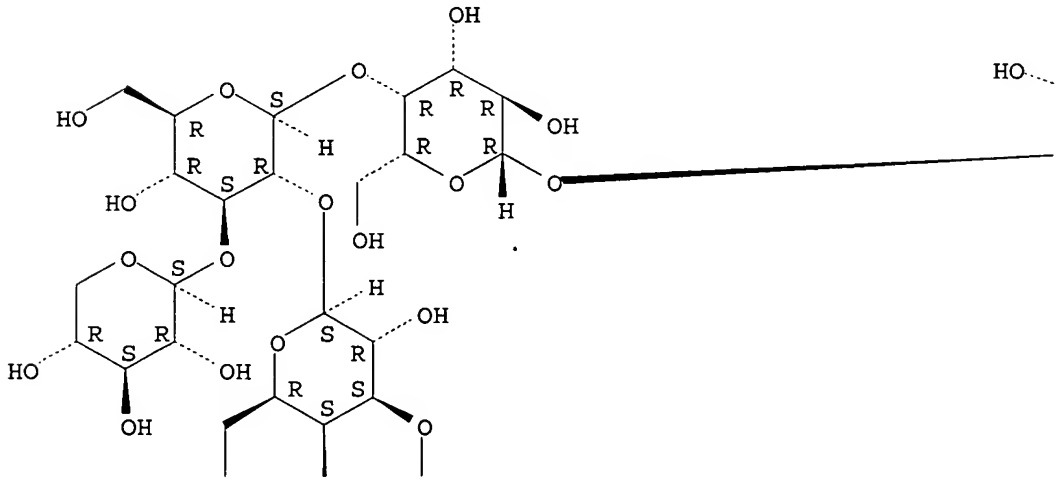
IT **11024-24-1P**, Digitonin
(isolation of digitonin from Digitalis seeds)

RN 11024-24-1 HCAPLUS

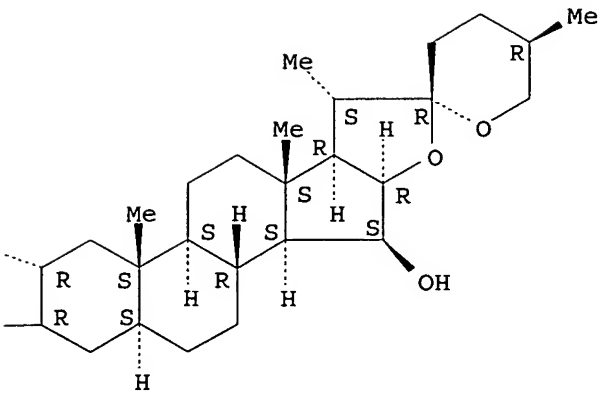
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

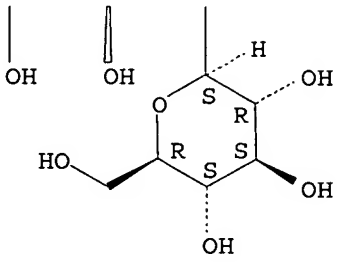
PAGE 1-A



PAGE 1-B



PAGE 2-A



CC 63-4 (Pharmaceuticals)
Section cross-reference(s): 11
IT **11024-24-1P**, Digitonin
(isolation of digitonin from Digitalis seeds)

L28 ANSWER 24 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:294522 HCAPLUS
DOCUMENT NUMBER: 135:220768
TITLE: Digitonin enhances the anti-tumor effect of cisplatin against methylcholanthrene-induced rat sarcoma cells in vitro
AUTHOR(S): Tanaka, Toshiki; Kaneda, Yoshikazu; Li, Tao-Sheng; Matsuoka, Takahisa; Zempo, Nobuya; Esato, Kensuke
CORPORATE SOURCE: Department of Surgery I, Yamaguchi University School of Medicine, Yamaguchi, 755-8505, Japan
SOURCE: Anticancer Research (2001), 21(1A), 313-315
CODEN: ANTRD4; ISSN: 0250-7005
PUBLISHER: International Institute of Anticancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Background: This study was designed to evaluate cellular uptake and cytotoxicity of cisplatin in methylcholanthrene (MCA)-induced rat sarcoma cells when used in combination with a detergent, digitonin. Materials and Methods: In the cellular intake study, after MCA sarcoma cells (107) were treated with cisplatin alone (50 μg/mL) and with cisplatin (50 μg/mL) in combination with digitonin at 20 μM and 50 μM, the cells were washed twice

with PBS and the platinum levels were measured by flameless atomic spectrometry. For the anti-tumor effect MCA sarcoma cells (103) were seeded in cell culture dishes and loaded for 10 min with PBS, digitonin (5 μM), cisplatin (5 μg/mL) or a combination of cisplatin (5 μg/mL) and digitonin (5 μM). The cells were then washed and incubated for 72 h. Bromodeoxyuridine uptake was measured with an ELISA system for determining viable cells counts. Results: Cell platinum levels were significantly elevated in proportion to the increase of digitonin ($p < 0.0001$). The number of viable cells was significantly decreased with, the combined cisplatin (5 μg/mL) - digitonin (5 μM) treatment ($p<0.0001$). Conclusion: Digitonin enhances the antitumor effect of cisplatin against methylcholanthrene-induced rat sarcoma in vitro.

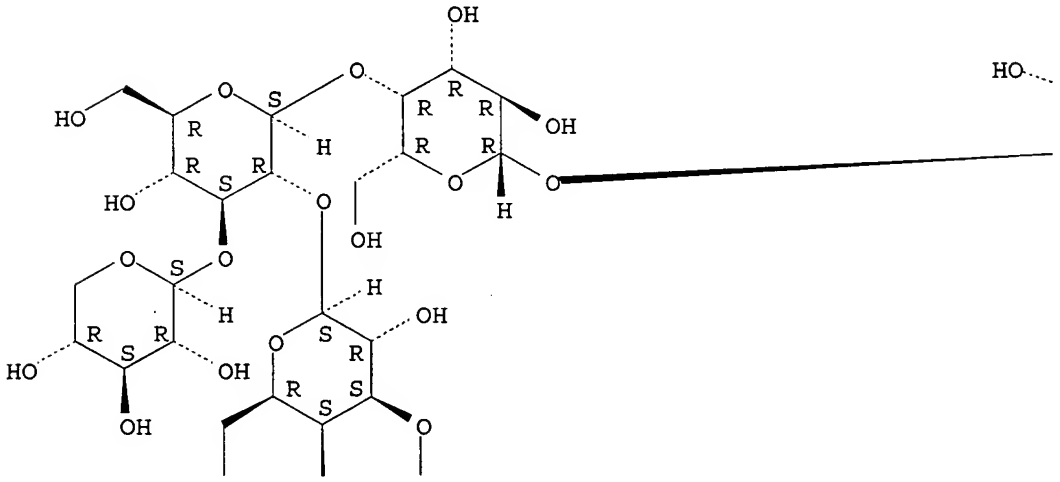
IT **11024-24-1**, Digitonin
(digitonin enhances the anti-tumor effect of cisplatin against methylcholanthrene-induced rat sarcoma cells in vitro)

RN 11024-24-1 HCAPLUS

CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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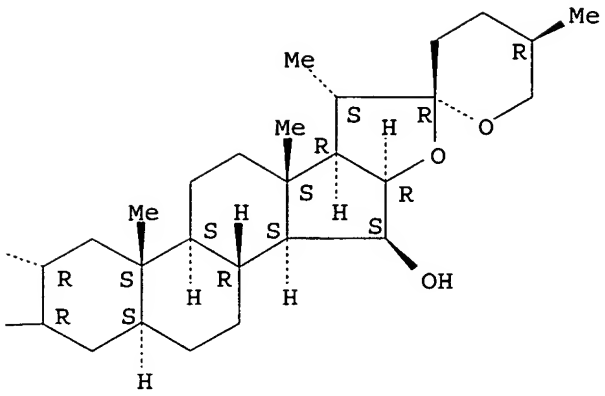
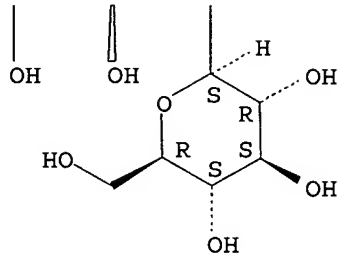


PAGE 2-A



CC 1-6 (Pharmacology)
IT **11024-24-1**, Digitonin 15663-27-1, cisplatin
(digitonin enhances the anti-tumor effect of cisplatin against methylcholanthrene-induced rat sarcoma cells in vitro)
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 25 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:115391 HCAPLUS
DOCUMENT NUMBER: 134:159836
TITLE: Spectrophotometric measurement in color-based biochemical and immunological assays
INVENTOR(S): Evelegh, Michael J.
PATENT ASSIGNEE(S): IMI International Medical Innovations Inc., Can.
SOURCE: PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001011359	A2	20010215	WO 2000-CA918	2000

0804

WO 2001011359 A3 20011206
WO 2001011359 C2 20020829
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
BR 2000013096 A 20020507 BR 2000-13096
2000
0804
EP 1218748 A2 20020703 EP 2000-954181
2000
0804
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL
JP 2003506715 T2 20030218 JP 2001-515964
2000
0804
AU 781034 B2 20050428 AU 2000-66734
2000
0804
RU 2271539 C2 20060310 RU 2002-103517
2000
0804
US 2005003468 A1 20050106 US 2004-887737
2004
0709
PRIORITY APPLN. INFO.: CA 1999-2279793 A
1999
0806
CA 2000-2296163 A
2000
0117
CA 2000-2306315 A
2000
0420
WO 2000-CA918 W
2000
0804
US 2001-830708 B1
2001
0430

AB A process is provided for analyzing a specimen of biol. material in any of a number of biochem. or immunol. tests for an analyte which involves subjecting the specimen to treatment which develops a color correlating to the amount of analyte in the specimen. According to the invention at least one defined color characteristic selected from hue angle, chroma, saturation and lightness of the developed color is measured and the results of

that measurement analyzed to determine the presence or concentration of the analyte in the specimen. Particular applications are to the detection of cancerous or pre-cancerous abnormalities from the anal. of lung mucus, throat mucus, cervical mucus or seminal fluid. A reflection spectrometer for measuring cholesterol in skin is described.

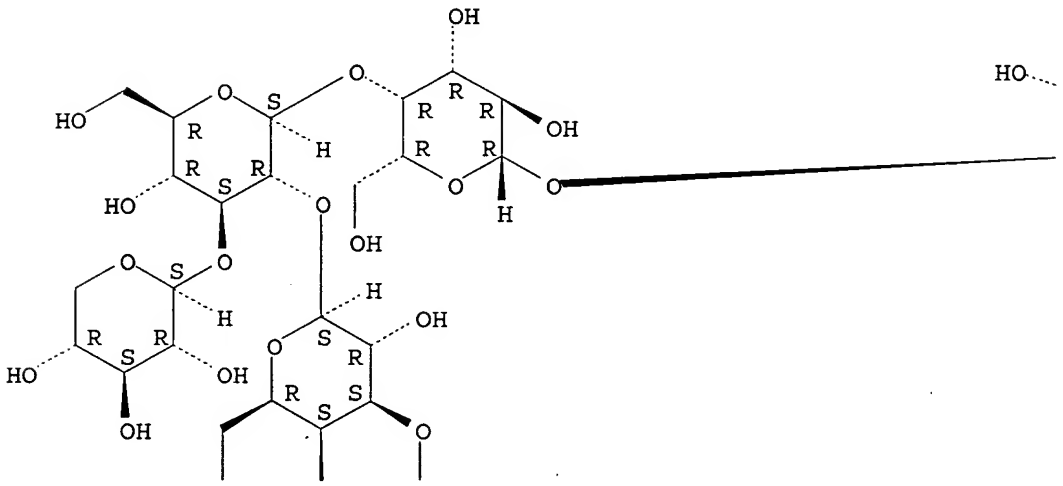
IT **11024-24-1**, Digitonin
(as cholesterol binding agent; spectrophotometric measurement in color-based biochem. and immunol. assays)

RN 11024-24-1 HCAPLUS

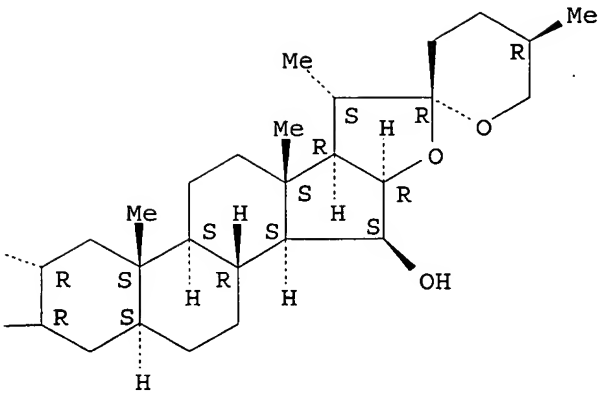
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

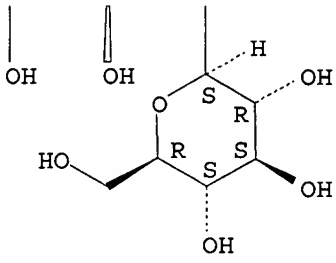
PAGE 1-A



PAGE 1-B



PAGE 2-A



IC ICM G01N033-50
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 15
IT **11024-24-1**, Digitonin
(as cholesterol binding agent; spectrophotometric measurement in color-based biochem. and immunol. assays)

L28 ANSWER 26 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:756545 HCAPLUS
DOCUMENT NUMBER: 133:340220
TITLE: Adjuvant comprising a saponin and an immunostimulatory oligonucleotide for manufacture of vaccines
INVENTOR(S): Friede, Martin; Garcon, Nathalie; Hermand, Philippe
PATENT ASSIGNEE(S): Smithkline Beecham Biologicals SA, Belg.
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000062800	A2	20001026	WO 2000-EP2920	2000

0404

WO 2000062800 A3 20010111
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6558670 B1 20030506 US 1999-301829
1999
0429

CA 2370697 AA 20001026 CA 2000-2370697
2000
0404

AU 2000041149 A5 20001102 AU 2000-41149
2000
0404

AU 764969 B2 20030904

BR 2000010612 A 20020213 BR 2000-10612
2000
0404

TR 200103018 T2 20020221 TR 2001-3018
2000
0404

EP 1187629 A2 20020320 EP 2000-920647
2000
0404

EP 1187629 B1 20040922
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 2002542203 T2 20021210 JP 2000-611936
2000
0404

AT 276758 E 20041015 AT 2000-920647
2000
0404

PT 1187629 T 20050228 PT 2000-920647
2000
0404

ES 2228497 T3 20050416 ES 2000-920647
2000
0404

EP 1541170 A1 20050615 EP 2004-76239
2000
0404
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, CY

CN 1739800 A 20060301 CN 2005-10109698
2000
0404

TW 232753 B1 20050521 TW 2000-89107209
2000
0418

US 6544518 B1 20030408 US 2000-690921
2000
1018

NO 2001005073	A	20011122	NO 2001-5073	2001 1018
ZA 2001008619	A	20020912	ZA 2001-8619	2001 1019
HK 1044484	A1	20050729	HK 2002-106189	2002 0822
US 2003161834	A1	20030828	US 2003-379164	2003 0303

PRIORITY APPLN. INFO.:	GB 1999-8885	A 1999 0419
	US 1999-301829	A 1999 0429
	CN 2000-808836	A3 2000 0404
	EP 2000-920647	A3 2000 0404
	WO 2000-EP2920	W 2000 0404
	US 2000-690921	A3 2000 1018

AB The present invention relates to adjuvant compns. which are suitable to be used in vaccines. In particular, the adjuvant compns. of the present invention comprises a saponin and an immunostimulatory oligonucleotide, optionally with a carrier. Also provided by the present invention are vaccines comprising the adjuvants of the present invention and an antigen. Further provided are methods of manufacture of the adjuvants and vaccines of the present invention and their use as medicaments. Methods of treating an individual susceptible to or suffering from a disease by the administration of the vaccines of the present invention are also provided.

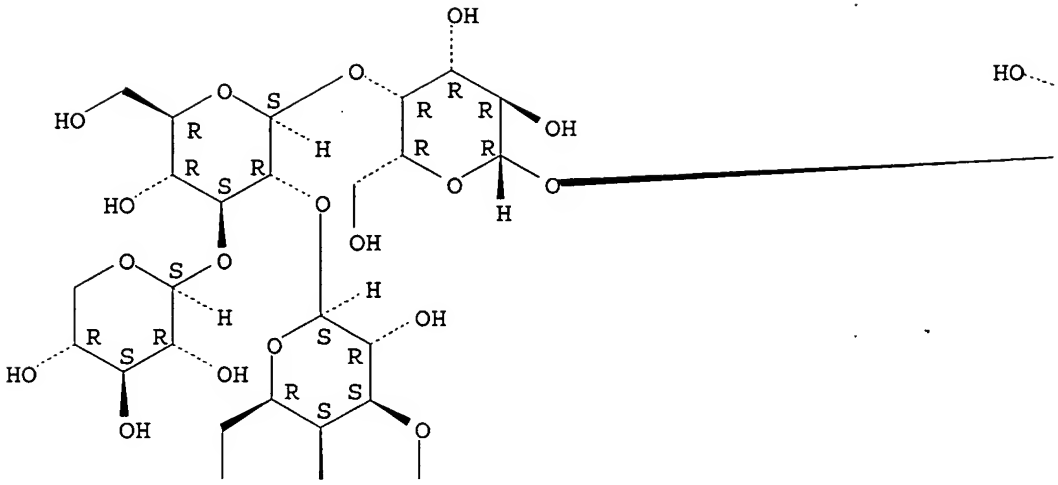
IT **11024-24-1**, Digitonin
(adjuvant comprising a saponin and an immunostimulatory oligonucleotide for manufacture of vaccines)

RN 11024-24-1 HCAPLUS

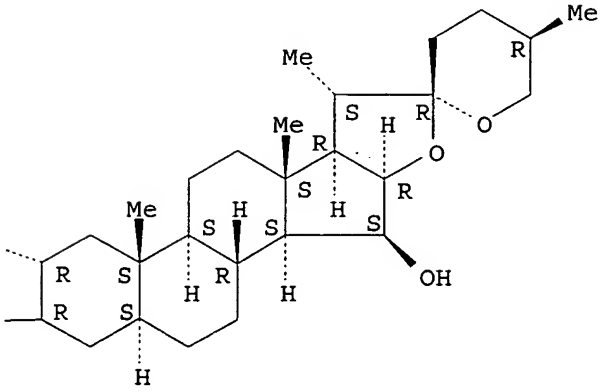
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

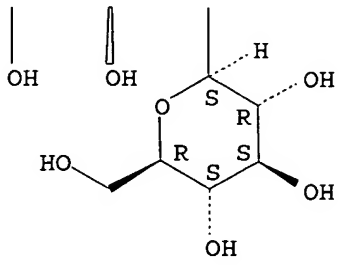
PAGE 1-A



PAGE 1-B



PAGE 2-A



IC ICM A61K039-00
CC 63-6 (Pharmaceuticals)
IT **11024-24-1**, Digitonin 11072-93-8, β-Escin
66594-14-7, Quil A 141256-04-4, QS21 208933-54-4, QS7
218138-45-5, QS17
(adjuvant comprising a saponin and an immunostimulatory oligonucleotide for manufacture of vaccines)

L28 ANSWER 27 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:712989 HCAPLUS
DOCUMENT NUMBER: 133:276329
TITLE: Furcreastatin, its antitumor compositions, and its manufacture from Furcraea foetida leaf
INVENTOR(S): Umesawa, Kazuo; Kondo, Shinichi; Ikeda, Yoko; Segawa, Kaoru; Koyano, Takashi; Itahashi, Masaki
PATENT ASSIGNEE(S): Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000281698	A2	20001010	JP 1999-81379	1999 0325

PRIORITY APPLN. INFO.: JP 1999-81379 1999 0325

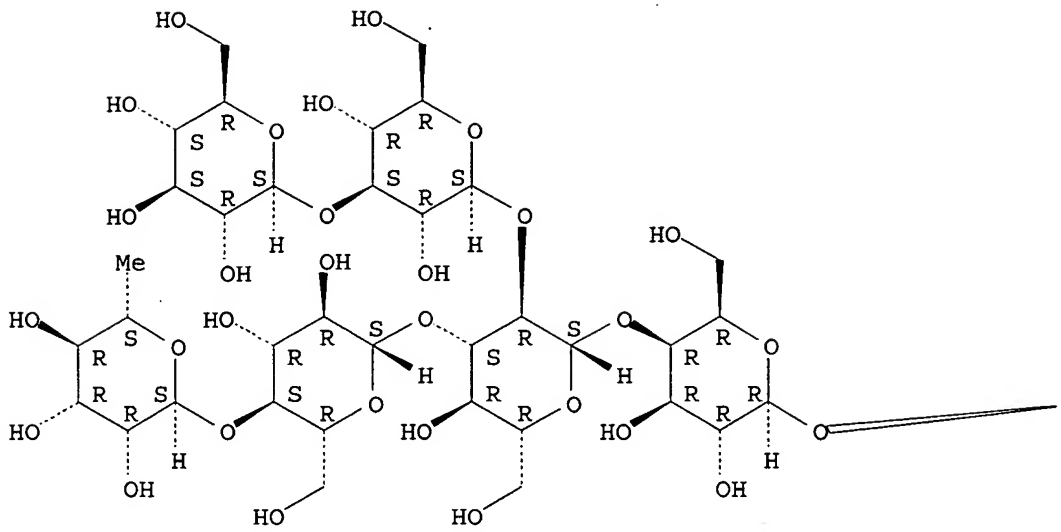
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

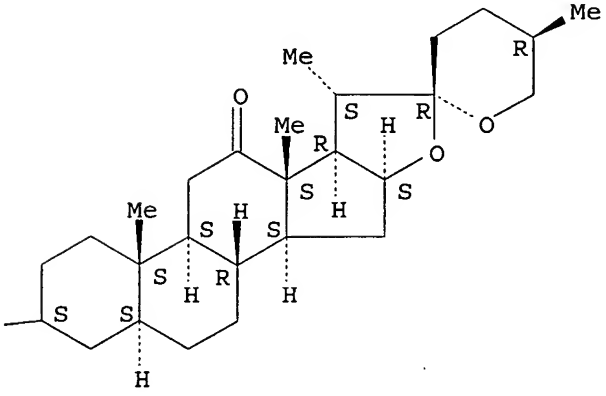
AB The compns. contain furcreastatin (I) extracted from F. foetida with H2O-containing organic solvent, as active ingredient. I showed specific cytotoxicity to 10(1)-mp53 cell with IC50 of 4 μg/mL and antitumor activity against HSC-3 cell with IC50 of 3 μg/mL.
IT **262378-87-0P**, Furcreastatin
(antitumor compns. containing furcreastatin extracted from Furcraea foetida)
RN 262378-87-0 HCAPLUS
CN Spirostan-12-one, 3-[(O-6-deoxy-α-L-mannopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→3)-O-[O-β-D-glucopyranosyl-(1→3)-β-D-glucopyranosyl-(1→2)]-O-β-D-glucopyranosyl-(1→4)-β-D-galactopyranosyl)oxy]-, (3β,5α,25R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A



PAGE 1-B



IC ICM C07J017-00
ICS A61P035-00; A61K035-78
CC 1-6 (Pharmacology)
Section cross-reference(s): 63
IT **262378-87-0P**, Furcreastatin
(antitumor compns. containing furcreastatin extracted from Furcraea foetida)

L28 ANSWER 28 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:475554 HCAPLUS
DOCUMENT NUMBER: 133:103722
TITLE: Novel agents and methods for treatment and diagnosis of ocular disorders
INVENTOR(S): Thiel, Michael Alexander; Zola, Heddy; Coster, Douglas John; Williams, Keryn Anne

PATENT ASSIGNEE(S): The Flinders University of South Australia, Australia
SOURCE: PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000040262	A1	20000713	WO 1999-AU1163	19991224
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2348488	AA	20000713	CA 1999-2348488	19991224
EP 1140170	A1	20011010	EP 1999-966798	19991224
EP 1140170	B1	20060621		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY				
JP 2002534394	T2	20021015	JP 2000-592017	19991224
NZ 511219	A	20030530	NZ 1999-511219	19991224
AU 775778	B2	20040812	AU 2000-22707	19991224
AT 330631	E	20060715	AT 1999-966798	19991224
ZA 2001003884	A	20020814	ZA 2001-3884	20010514
US 6773916	B1	20040810	US 2001-857399	20010919

PRIORITY APPLN. INFO.:			
		AU 1999-8033	A 19990105
		AU 1999-3305	A 19991007

WO 1999-AU1163 W
1999
1224

AB A method of treating ocular disorders is disclosed, comprising administering to patients an effective amount of a sub-Ig antigen-binding mol. (such as single-chain Fv fragments) that interact with target antigens associated with the disorder. Target antigens include cytokine receptors, adhesion mols., CD antigens, herpes virus antigens, etc. The Ig fragments can also be treated with agents such as DMSO, capric acid, digitonin, detergents, benzalkonium chloride, PEG, etc. in order to enhance the ocular penetration of the Ig fragments. The invention is also directed to compns. comprising this sub-Ig antigen-binding mol. and to a method of diagnosing an ocular condition using such mol. Ocular disorders suitable for treatment include corneal graft rejection, uveitis, conjunctivitis, keratitis, ocular tumors, maculopathies, and ocular penthiogoid.

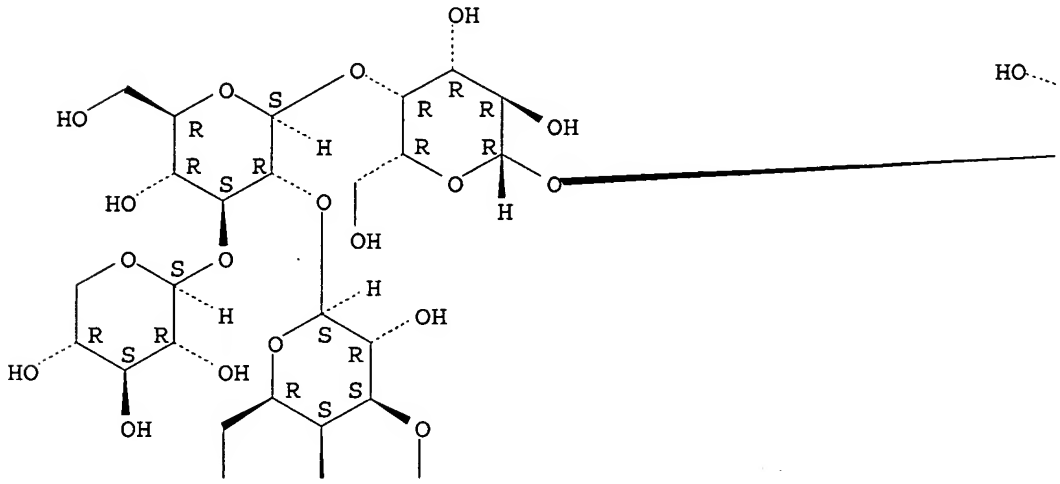
IT **11024-24-1**, Digitonin
(novel agents and methods for treatment and diagnosis of ocular disorders in relation to herpes virus antigens in relation to)

RN 11024-24-1 HCAPLUS

CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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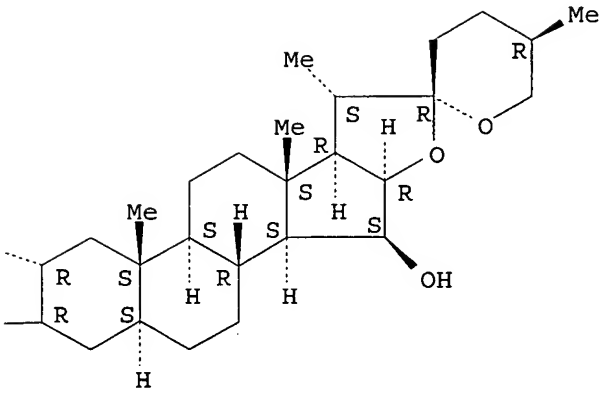
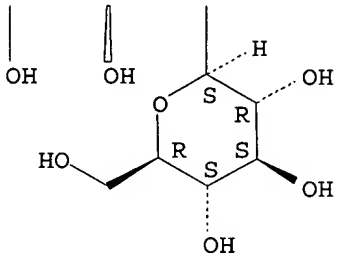


PAGE 2-A



IC ICM A61K039-395
ICS A61P027-02
CC 15-3 (Immunochemistry)
IT 67-68-5, DMSO, biological studies 334-48-5, Capric acid
11024-24-1, Digitonin 25322-68-3, Polyethylene glycol
39156-67-7, Dihydrocytochalasin B
(novel agents and methods for treatment and diagnosis of ocular disorders in relation to herpes virus antigens in relation to)
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 29 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:74784 HCAPLUS
DOCUMENT NUMBER: 132:83640
TITLE: Percutaneous oxicam compound compositions
INVENTOR(S): Hu, Youpu
PATENT ASSIGNEE(S): Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 41 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

CN 1177480	A	19980401	CN 1996-109837	1996 0920
CN 1108155	B	20030514		

PRIORITY APPLN. INFO.: CN 1996-109837 1996 0920

AB Percutaneous oxicam compound compns. [e.g. ointments] comprise analgesic and antiinflammatory oxicam compds. 0.1-30, absorption promoters 2-30, excipients 17-25, and water 40-80%. The oxicam compds. are selected from piroxicam, isoxicam, sudoxicam, cinnoxicam, tenoxicam and lomoxicam; and the absorption promoters from glycyrrhizic acid, oleanolic acid, malol, trans-cinnamic acid, β-myrcene, trans-cinnamaldehyde, cineole, terpineol, betulin, epicatechin, lauryl alc., ergosterol, terphenyl, pinene, limonene, digitonin, Et myristate and Tween-80. The excipient is composed of glycol 90.9%, and Na CM-cellulose 9.1%. The compns. are prepared by dissolving oxicam compds. and absorption promoters in glycol; dissolving Na CM-cellulose in water, and mixing.

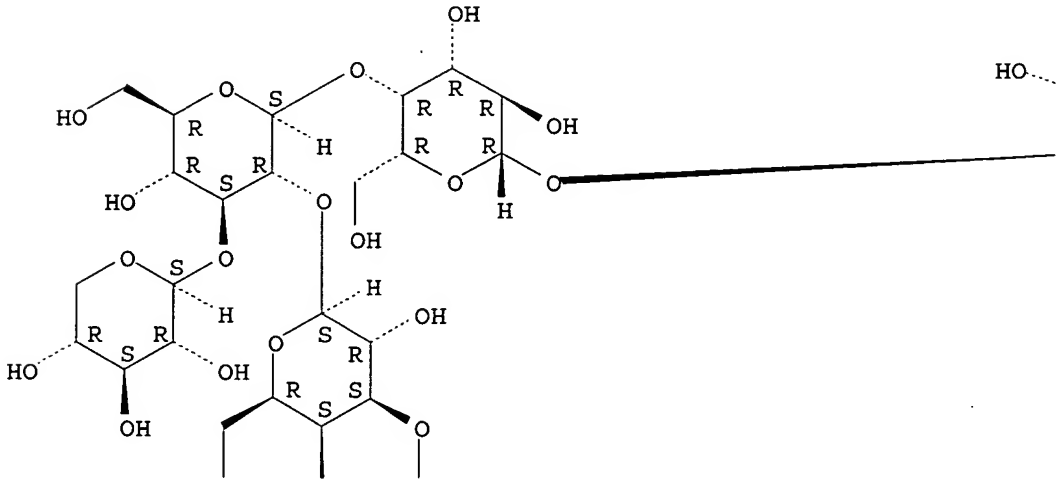
IT **11024-24-1**, Digitonin
(percutaneous oxicam compound compns.)

RN 11024-24-1 HCAPLUS

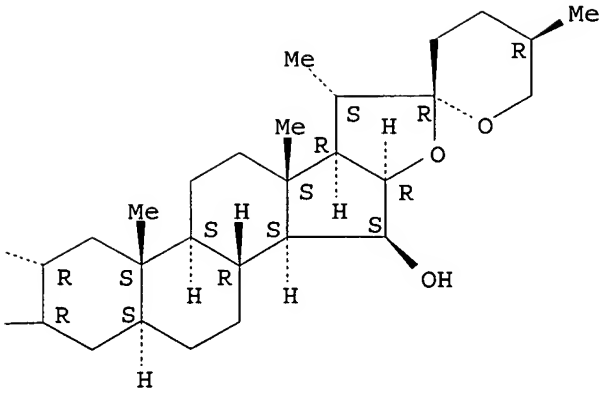
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

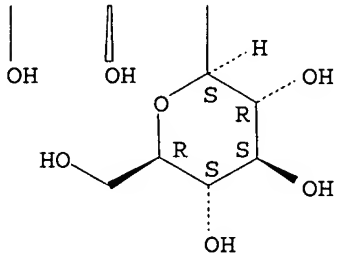
PAGE 1-A



PAGE 1-B



PAGE 2-A



IC ICM A61K031-54
ICS A61K009-00; A61K047-06
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1
IT 57-87-4, Ergosterol 77-52-1, Malol 107-21-1, Ethylene Glycol, biological studies 112-53-8, Lauryl alcohol 123-35-3, β-Myrcene 124-06-1, Ethyl myristate 138-86-3, Limonene 140-10-3, Trans-Cinnamic acid, biological studies 470-82-6, Cineole 473-98-3, Betulin 490-46-0, Epicatechin 508-02-1, Oleanolic acid 1330-16-1, Pinene 1405-86-3, Glycyrrhizic acid 8000-41-7, Terpineol 9004-32-4 9005-65-6, Tween-80 **11024-24-1**, Digitonin 14371-10-9, Trans-Cinnamaldehyde 26140-60-3, Terphenyl 34042-85-8, Sudoxicam 34552-84-6, Isoxicam 36322-90-4, Piroxicam 59804-37-4, Tenoxicam 70374-27-5, Lomoxicam 87234-24-0, Cinnoxicam
(percutaneous oxicam compound compns.)

L28 ANSWER 30 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:672604 HCAPLUS
DOCUMENT NUMBER: 131:314175
TITLE: Polymer particle vaccine delivery system for Helicobacter pylori surface antigen
INVENTOR(S): Carlsson, Hans; Larsson, Anette; Soderlind, Erik
PATENT ASSIGNEE(S): Astra Aktiebolag, Swed.
SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9952550	A1	19991021	WO 1999-SE582	1999 0409
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9940662	A1	19991101	AU 1999-40662	1999 0409
AU 765118	B2	20030911		
EP 1071457	A1	20010131	EP 1999-924075	1999 0409
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002516822	T2	20020611	JP 2000-543160	1999 0409
US 6838089	B1	20050104	US 1999-308435	1999 0519

PRIORITY APPLN. INFO.:				
			SE 1998-1288 A	1998 0414
			WO 1999-SE582 W	1999 0409

AB The present invention concerns polymer particle vaccine delivery systems in which a water insol. protein antigen, e.g. a lipidated HpaA protein, is incorporated with particles comprising a polymer matrix. The present invention also concerns a method for incorporating such a water insol. protein antigen with a polymer matrix in order to produce a polymer particle vaccine delivery system. In addition, the invention also provides a vaccine composition comprising the polymer particle delivery system. The vaccine can be used to treat and/or reduce the risk of for example Helicobacter infection.

IT **11024-24-1**, Digitonin
(polymer particle vaccine delivery system for Helicobacter pylori surface antigen)

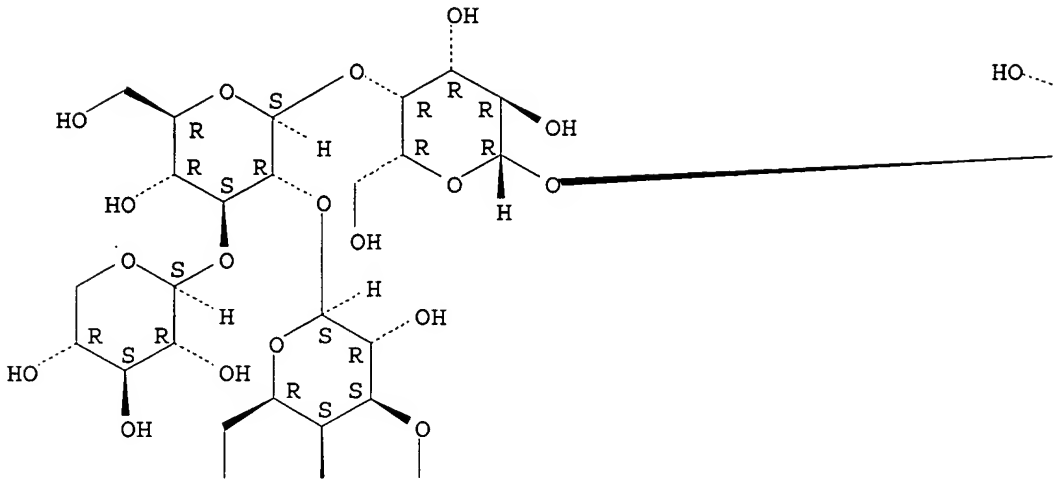
RN 11024-24-1 HCAPLUS

CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)-

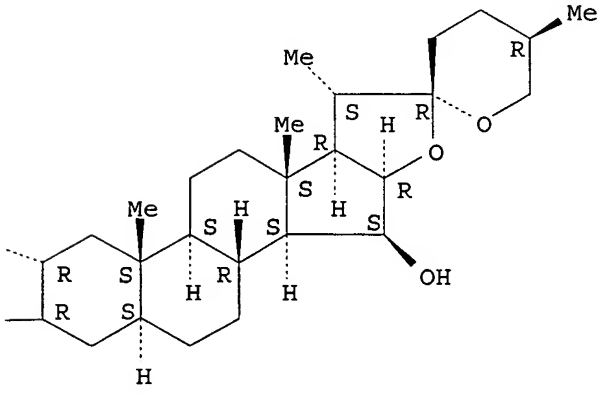
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

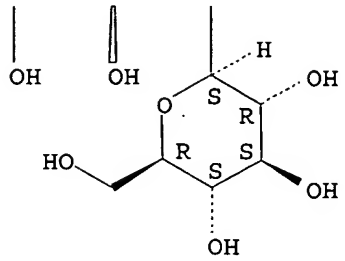
PAGE 1-A



PAGE 1-B



PAGE 2-A



IC ICM A61K039-39
ICS A61K009-16
CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 15
IT 57-50-1D, Sucrose, esters 57-88-5, Cholesterol, biological studies 69-79-4D, Maltose, alkyl derivs. 81-25-4D, Cholic acid, salts 83-44-3D, Deoxycholic acid, derivs. 137-16-6 144-62-7D, Oxalic acid, polymers 9002-86-2D, Polyvinylchloride, derivs. 9002-89-5, Polyvinylalcohol 9003-01-4D, Polyacrylic acid, derivs. 9003-39-8, Polyvinylpyrrolidone 9003-53-6D, Polystyrene, derivs. 9004-35-7D, Cellulose acetate, acyl-substituted derivs. **11024-24-1**, Digitonin 12441-09-7D, Sorbitan, fatty acid esters 24937-78-8, Ethylene-vinyl acetate copolymer 24980-41-4, Polycaprolactone 24981-14-4D, Polyvinyl fluoride, derivs. 25232-42-2, Polyvinylimidazole 25248-42-4, Polycaprolactone 25322-68-3 25322-68-3D, derivs. 25618-55-7, Polyglycerol 26009-03-0, Polyglycolic acid 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26100-51-6, Polylactic acid 26124-68-5, Polyglycolic acid 26780-50-7, Poly(DL-lactide-co-glycolide) 27925-02-6 27941-05-5 34346-01-5, Poly(lactic acid-glycolic acid) 50646-93-0, Emulphogen 52352-27-9, Polyhydroxybutyric acid 70524-20-8 80181-31-3 106392-12-5, Ethylene oxide-propyleneoxide block copolymer 112143-11-0, Ethylene oxide-lactic acid block copolymer 128171-16-4, Hydroxybutyric acid-hydroxyvaleric acid copolymer 192932-24-4
(polymer particle vaccine delivery system for Helicobacter pylori surface antigen)
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 31 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:468719 HCAPLUS
DOCUMENT NUMBER: 131:113403
TITLE: Immunoassay for detection of very low density lipoprotein and antibodies useful therefor
INVENTOR(S): Kundu, Sumar K.
PATENT ASSIGNEE(S): Abbott Laboratories, USA
SOURCE: PCT Int. Appl., 61 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9936785	A1	19990722	WO 1999-US902	1999 0115
W: CA, JP RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 2002177240	A1	20021128	US 1998-8059	1998 0116
US 6492185	B2	20021210		
CA 2317419	AA	19990722	CA 1999-2317419	1999 0115
EP 1047944	A1	20001102	EP 1999-903118	1999 0115
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL				
US 2003124743	A1	20030703	US 2002-273338	2002 1017
PRIORITY APPLN. INFO.:			US 1998-8059 A	1998 0116
			WO 1999-US902 W	1999 0115

AB The present invention provides a method for directly measuring apolipoprotein B-100 (apoB) or cholesterol associated with very low d. lipoprotein (VLDL) in a fluid sample. In one embodiment the method involves the specific capture of intact VLDL particles from a fluid sample with a specific VLDL binding agent. The quantity of VLDL-apoB present in the sample is then measured by detecting the amount of VLDL-apoB bound to the binding agent-VLDL complexes formed in the reaction. In an alternative embodiment of the method, intact VLDL particles from a fluid sample are also captured with a specific VLDL binding agent and thereafter the cholesterol associated with the bound VLDL is determined The cholesterol contained in the binding-agent-VLDL complexes can be detected by reacting the complexes with labeled cholesterol specific binding agents and measuring the amount of label bound thereto, or by releasing the cholesterol in the complexes and measuring the amount to cholesterol released. VLDL specific binding reagents are also provided. Monoclonal antibodies (MAbs) were prepared by the hybridoma method using apolipoprotein CIII as immunogen in mice. MAb 18-358-211 was immobilized on CNBr-activated Sepharose 4B and used in an immunocapture assay for VLDL-cholesterol.

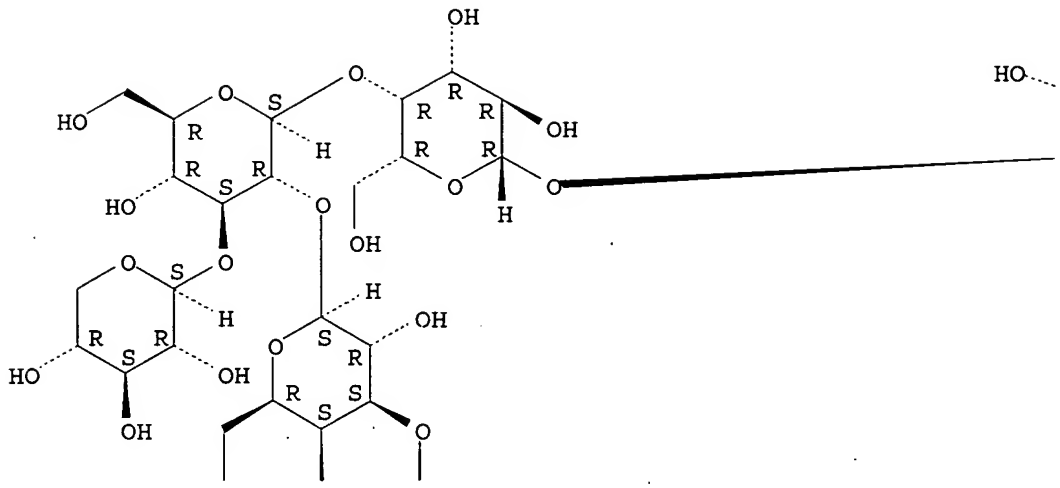
IT **11024-24-1DP**, Digitonin, peroxidase conjugates
(immunoassay for detection of very low d. lipoprotein and antibodies useful therefor)

RN 11024-24-1 HCAPLUS

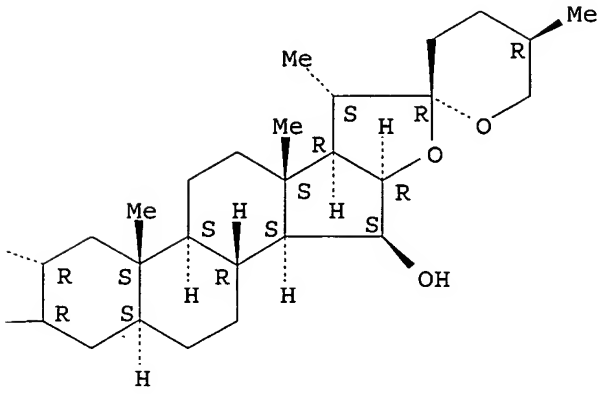
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

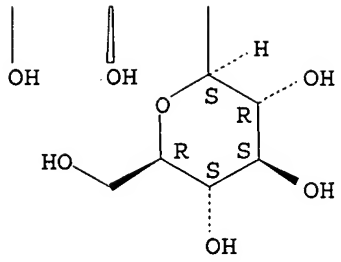
PAGE 1-A



PAGE 1-B



PAGE 2-A



IC ICM G01N033-92
ICS G01N033-577; C07K016-18; C12N005-18
CC 9-10 (Biochemical Methods)
Section cross-reference(s): 15
IT 9003-99-0DP, Peroxidase, digitonin conjugates **11024-24-1DP**
, Digitonin, peroxidase conjugates
(immunoassay for detection of very low d. lipoprotein and antibodies useful therefor)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 32 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:241997 HCAPLUS
DOCUMENT NUMBER: 130:287063
TITLE: Method of preparing and using phytochemicals
INVENTOR(S): Empie, Mark; Gugger, Eric
PATENT ASSIGNEE(S): Archer Daniels Midland Company, USA
SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 906761	A2	19990407	EP 1998-308060	1998 1002
EP 906761	A3	19990519		
EP 906761	B1	20040714		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6261565	B1	20010717	US 1998-162038	1998 0928
ZA 9808962	A	19990913	ZA 1998-8962	1998 1001
EP 1466609	A1	20041013	EP 2004-15530	1998 1002
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
PT 906761	T	20041130	PT 1998-308060	

					1998 1002
ES 2224337	T3	20050301	ES 1998-308060		1998 1002
HK 1016879	A1	20050422	HK 1999-101886		1999 0427
PRIORITY APPLN. INFO.:			US 1997-60549P	P	1997 1002
			US 1998-162038	P	1998 0928
			US 1996-614545	A3	1996 0313
			US 1997-868629	A2	1997 0604
			US 1998-35588	A2	1998 0305
			US 1998-162038P	P	1998 0928
			EP 1998-308060	A3	1998 1002

AB A composition is prepared by extracting phytochems. from plant matter. This composition is enriched preferably in isoflavones, lignans, saponins, catechins and phenolic acids. Soy is the preferred source of these chems.; however, other plants may also be used, such as red clover, kudzu, flax, and cocoa. The composition is a dietary supplement for treatment of various cancers, pre- and post-menstrual syndromes, and various other disorders.

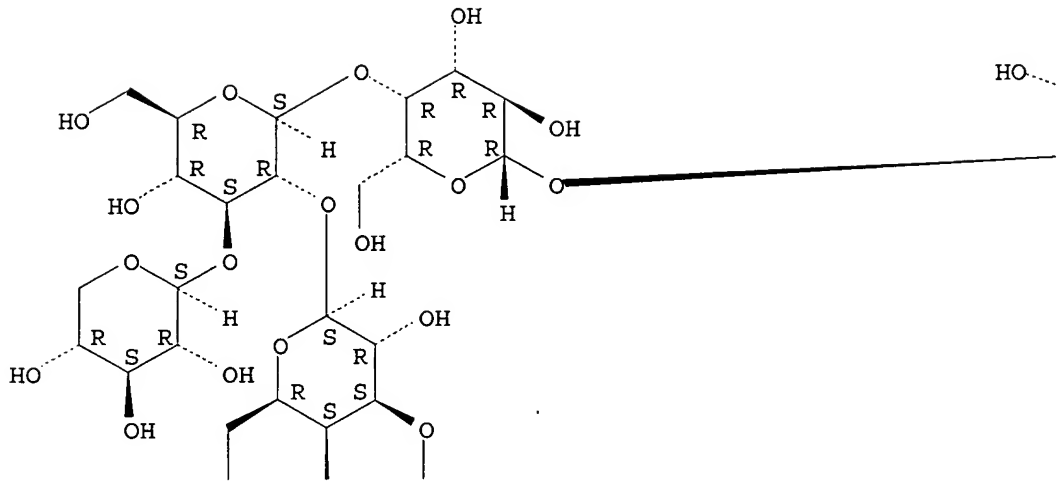
IT **11024-24-1D**, Digitonin, reaction with glycyrrhizin (method of preparing and dietary use of phytochems.)

RN 11024-24-1 HCAPLUS

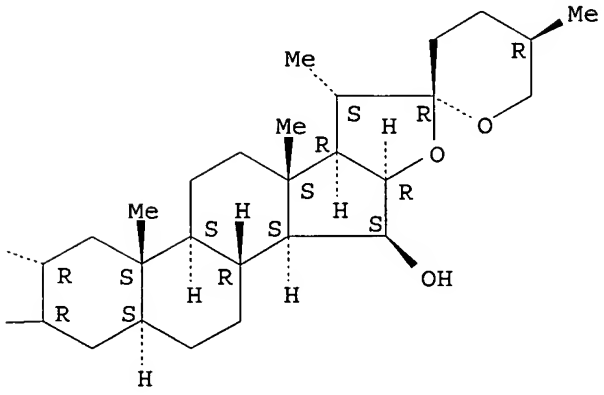
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25 R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

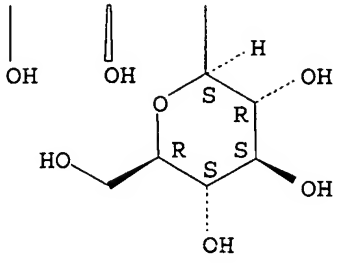
PAGE 1-A



PAGE 1-B



PAGE 2-A



IC ICM A61K035-78
ICS A23L001-30
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 14, 17, 18
IT 50-70-4, Sorbitol, biological studies 63-42-3, Lactose 69-72-7, Salicylic acid, biological studies 121-34-6, Vanillic acid 149-91-7, Gallic acid, biological studies 154-23-4, Catechin, biological studies 156-38-7 327-97-9, Chlorogenic acid 331-39-5, Caffeic acid 446-72-0, Genistein 465-99-6, Hederagenin 485-72-3, Formononetin 486-66-8, Daidzein 487-36-5, Pinoresinol 490-46-0, Epicatechin 490-79-9, Gentisic acid 491-80-5, Biochanin A 500-38-9, Nordihydroguaiaretic acid 508-01-0, Soyasapogenol A 529-59-9, Genistin 530-57-4, Syringic acid 530-59-6, Sinapic acid 548-29-8, Isolariciresinol 552-66-9, Daidzin 557-04-0, Magnesium stearate 580-72-3, Matairesinol 595-14-2, Soyasapogenol C 595-15-3, Soyasapogenol B 599-07-5, Medicagenic acid 621-82-9, Cinnamic acid, biological studies 970-73-0, Gallocatechin 970-74-1, Epigallocatechin 1135-24-6, Ferulic acid 1393-03-9 1405-86-3D, Glycyrrhizin, reaction with digitonin 2955-23-9, Olivil 6750-59-0, Soyasapogenol E 7440-70-2D, Calcium, compds., biological studies 7693-13-2, Calcium citrate 7757-93-9, Dicalcium phosphate 9004-34-6, Cellulose, biological studies **11024-24-1D**, Digitonin, reaction with glycyrrhizin 17406-45-0, Tomatine 17482-42-7, Calcium malate 25429-38-3, Coumaric acid 27003-73-2, Lariciresinol 29388-59-8, Secoisolariciresinol 29656-58-4, Hydroxybenzoic acid 40957-83-3, Glycitein 56283-67-1, Lucernic acid 65892-76-4, Soyasapogenol D 84161-89-7, Zanhic acid 104033-83-2, Soyasapogenol F
(method of preparing and dietary use of phytochems.)

L28 ANSWER 33 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:579982 HCAPLUS
DOCUMENT NUMBER: 129:207212
TITLE: Transdermal preparations of oxicam drugs
INVENTOR(S): Hu, Yoa-pu; Chen, Chieh Fu
PATENT ASSIGNEE(S): National Research Institute of Chinese Medicine, Taiwan
SOURCE: Eur. Pat. Appl., 50 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 858805	A2	19980819	EP 1997-308145	1997 1014
EP 858805	A3	19980902		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 10218774	A2	19980818	JP 1997-44750	1997 0213
JP 3143885	B2	20010307		

PRIORITY APPLN. INFO.: JP 1997-44750 A 1997 0213

US 1997-886400 A 1997 0701

AB The present invention is related to a transdermal preparation of oxicam drugs. The preparation comprises 0.1 to 50% of an oxicam, 0.1 to 70% of pure compns. from Chinese herbal enhancers as enhancers, as well as other necessary excipients for the transdermal delivery of an active ingredient. This transdermal preparation is intended to be used for anti-inflammatory cases, but with few gastrointestinal side effects. Thus, 4% piroxicam was dissolved in 20% ethylene glycol. A solution of 2% CM-cellulose sodium in water was mixed with the above solution to give a gel.

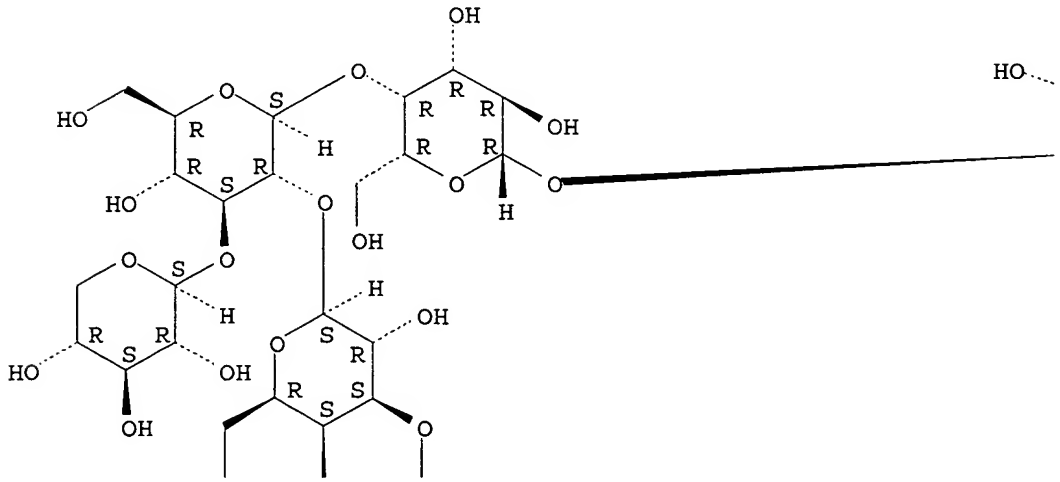
IT **11024-24-1**, Digitonin
(transdermal prepns. containing oxicam drugs)

RN 11024-24-1 HCAPLUS

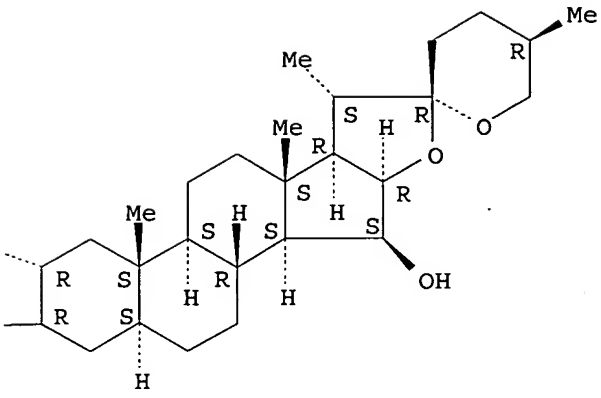
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

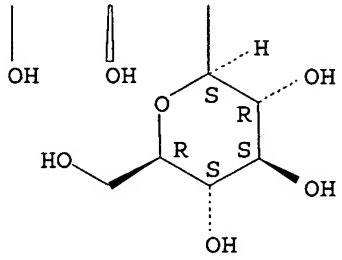
PAGE 1-A



PAGE 1-B



PAGE 2-A



IC ICM A61K031-54
CC 63-6 (Pharmaceuticals)
IT 57-87-4, Ergosterol 77-52-1, Ursolic acid 92-94-4, p-Terphenyl 98-55-5, α-Terpineol 107-21-1, Ethylene glycol, biological studies 112-53-8, Lauryl alcohol 123-35-3, β-Myrcene 124-06-1, Ethyl myristate 140-10-3, trans-Cinnamic acid, biological studies 154-23-4, (+)-Catechin 470-82-6, Cineole 473-98-3, Betulin 490-46-0, Epicatechin 508-02-1, Oleanolic acid 1405-86-3, Glycyrrhizin 5989-27-5, (+)-Limonene 7785-26-4, (-)-α-Pinene 8000-41-7, Terpineol 9004-32-4, Cellulose, carboxymethyl ether, sodium salt 9005-65-6, Tween 80 **11024-24-1**, Digitonin 14371-10-9, trans-Cinnamaldehyde 34042-85-8, Sudoxicam 34552-84-6, IsOxicam 36322-90-4, Piroxicam 59804-37-4, Tenoxicam 70374-27-5, Lomoxicam 87234-24-0, Cinnoxicam
(transdermal prepns. containing oxicam drugs)

L28 ANSWER 34 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:535707 HCAPLUS
DOCUMENT NUMBER: 129:221212
TITLE: Transdermal preparations of oxicams containing Chinese drug components
INVENTOR(S): Ko, Yo Pu; Chin, Kai Fu
PATENT ASSIGNEE(S): Chinese Academy of Medical sciences, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10218774	A2	19980818	JP 1997-44750	19970213
JP 3143885	B2	20010307		
EP 858805	A2	19980819	EP 1997-308145	19971014
EP 858805	A3	19980902		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			JP 1997-44750 A	19970213
			US 1997-886400 A	19970701

AB Antipyretic and analgesic transdermal prepns. contain 0.1-50 weight% oxicams, 0.1-70 weight% Chinese drug components, e.g. pinene, trans-cinnamic acid, cineole, etc., as absorption enhancers, and excipients. Addition of β-myrcene to a piroxicam (I) gel remarkably increased absorption of I from a sheet of abdominal skin of nude mice.

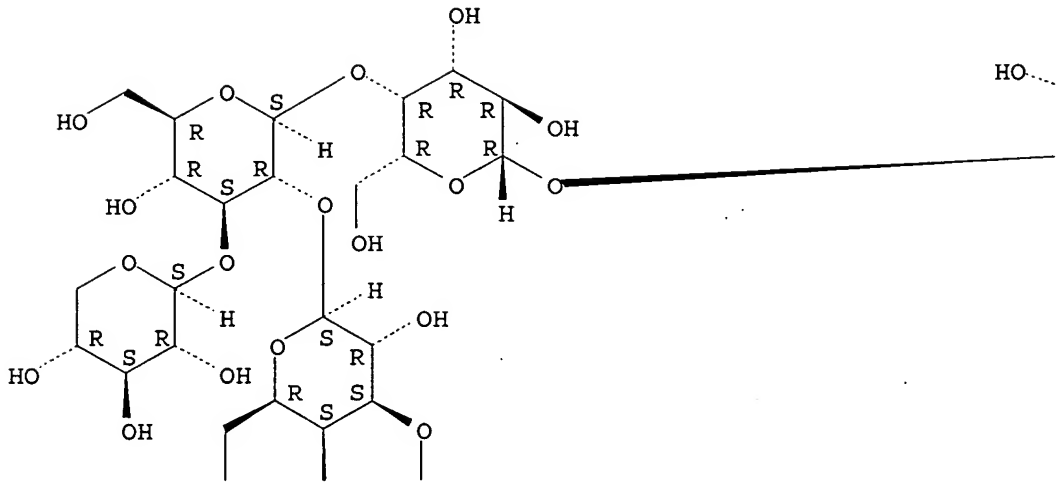
IT **11024-24-1**, Digitonin
(transdermal prepns. of antipyretic analgesic oxicams containing Chinese drug components as absorption enhancers)

RN 11024-24-1 HCAPLUS

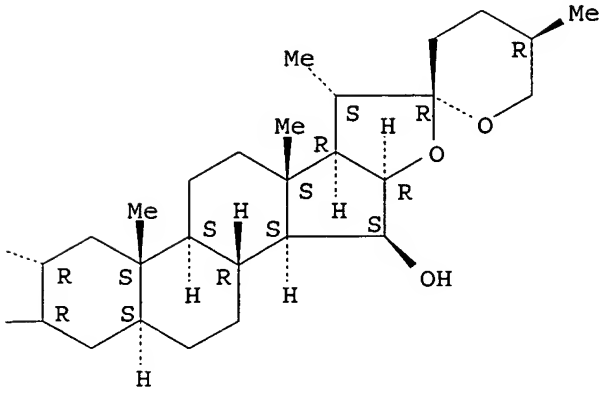
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

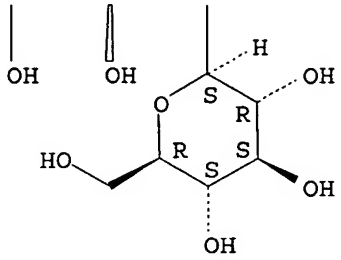
PAGE 1-A



PAGE 1-B



PAGE 2-A



IC ICM A61K031-54
ICS A61K031-54; A61K009-06; A61K009-08; A61K009-107; A61K009-70; A61K047-46; A61K035-78; C07D513-04
CC 63-6 (Pharmaceuticals)
IT 57-87-4, Ergosterol 77-52-1, Ursolic acid 112-53-8, Lauryl alcohol 123-35-3, β-Myrcene 124-06-1, Ethyl myristate 140-10-3, trans-Cinnamic acid, biological studies 154-23-4, (+)-Catechin 470-82-6, Cineole 473-98-3, Betulin 490-46-0, Epicatechin 508-02-1, Oleanolic acid 1330-16-1, Pinene 1405-86-3, Glycyrrhizin 7785-26-4 8000-41-7, Terpineol **11024-24-1**, Digitonin 14371-10-9, trans-Cinnamaldehyde 26140-60-3, Terphenyl
(transdermal prepns. of antipyretic analgesic oxicams containing Chinese drug components as absorption enhancers)

L28 ANSWER 35 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:389172 HCAPLUS
DOCUMENT NUMBER: 129:113511
TITLE: Novel steroidal saponin and antimicrobial agents and antitumor agents containing it
INVENTOR(S): Ochi, Masamitsu; Tsuburaya, Etsuzo
PATENT ASSIGNEE(S): Nakano Suten K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

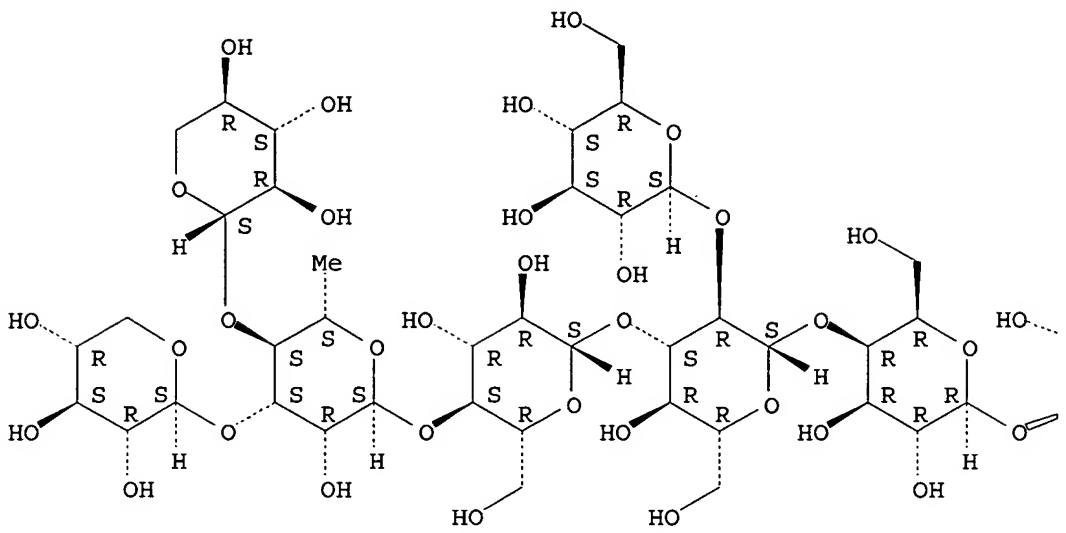
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10158295	A2	19980616	JP 1996-320142	1996 1129

PRIORITY APPLN. INFO.: JP 1996-320142 1996 1129

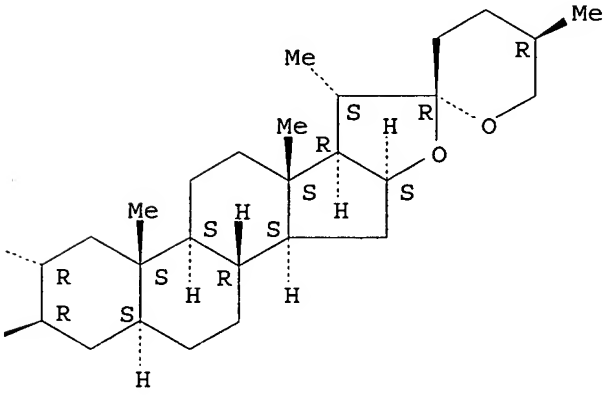
AB Antimicrobial agents and antitumor agents contain a steroidal saponin (gitogenin glycoside (I)). Extraction of 1 kg of Hosta sieboldiana leaves with 50% EtOH-H2O, removal of EtOH by evaporation, extraction of the aqueous solution with AcOEt, extraction of the aqueous layer with BuOH, and fractionation of the extract gave 8 mg I. I controlled Debaryomyces polymorphus and Zygosaccharomyces rouxii with min. inhibitory concns. of 10.0 and 5.0 ppm, resp. I inhibited Artemia larvae with LD50 of 30 ppm.
IT **209964-86-3P**
(novel steroidal saponin (gitogenin glycoside) from Hosta sieboldiana for antimicrobial and antitumor agents)
RN 209964-86-3 HCAPLUS
CN β-D-Galactopyranoside, (2α,3β,5α,25R)-2-hydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→2)-O-[O-β-D-xylopyranosyl-(1→3)-O-[β-D-xylopyranosyl-(1→4)]-O-6-deoxy-α-L-mannopyranosyl-(1→4)-β-D-glucopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



IC ICM C07J071-00
ICS A61K031-70; A61K035-78
CC 63-4 (Pharmaceuticals)
Section cross-reference(s): 1, 11, 32, 33
IT **209964-86-3P**
(novel steroidal saponin (gitogenin glycoside) from Hosta sieboldiana for antimicrobial and antitumor agents)

L28 ANSWER 36 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:274922 HCAPLUS
DOCUMENT NUMBER: 129:32293
TITLE: Steroid saponin from Hosta and antimicrobial and antitumor agents containing it

INVENTOR(S): Echi, Masamitsu; Enya, Etsuzo
PATENT ASSIGNEE(S): Nakano Vinegar Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10114791	A2	19980506	JP 1996-270292	1996 1011

PRIORITY APPLN. INFO.: JP 1996-270292 1996 1011

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Antimicrobial agents or antitumor agents contain steroid saponin I. I was extracted from dried leaves of H. sieboldiana. I inhibited Debaryomyces polymorphus and Zygosaccharomyces rouxii with MIC of 2.5-5.0 ppm. Antitumor activity of I was also shown in bioassay using Artemia larvae or ascidian egg.

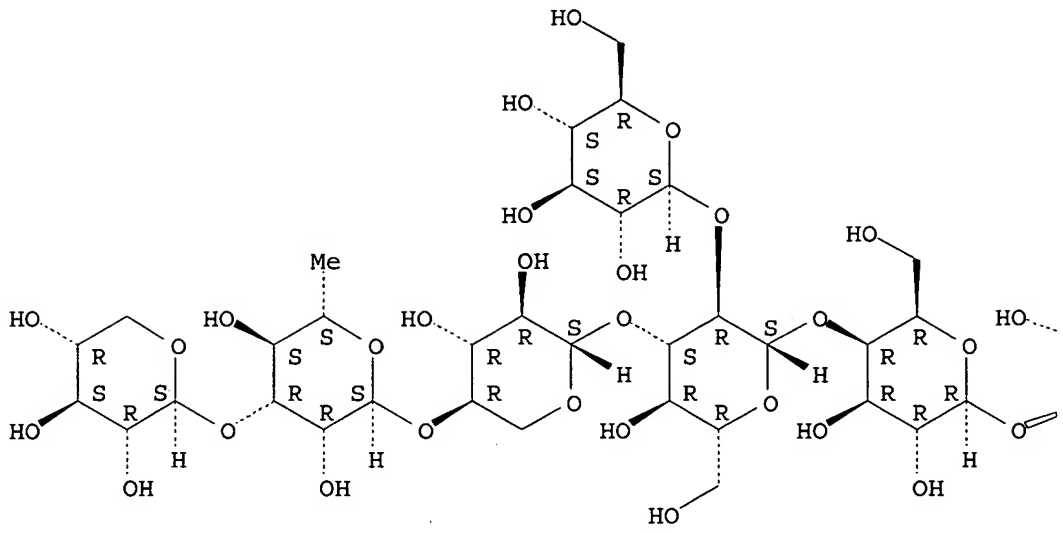
IT **208102-79-8P**
(steroid saponin from Hosta as antimicrobial and antitumor agents)

RN 208102-79-8 HCAPLUS

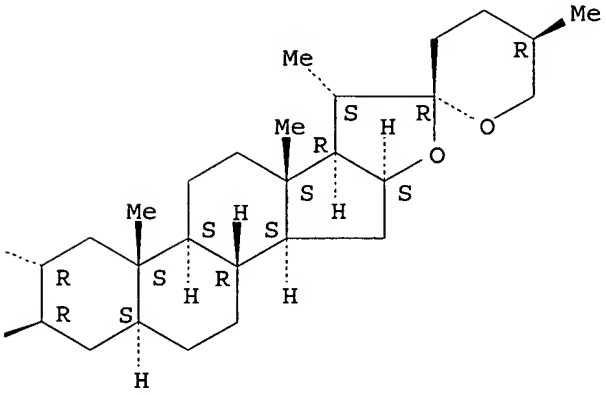
CN β-D-Galactopyranoside, (2α,3β,5α,25R)-2-hydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→2)-O-[O-β-D-xylopyranosyl-(1→3)-O-6-deoxy-α-L-mannopyranosyl-(1→4)-β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



IC ICM C07J071-00
ICS A61K031-70; A61K035-78
CC 63-4 (Pharmaceuticals)
Section cross-reference(s): 1, 17
IT **208102-79-8P**
(steroid saponin from Hosta as antimicrobial and antitumor agents)

L28 ANSWER 37 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:587288 HCAPLUS
DOCUMENT NUMBER: 127:231596
TITLE: Colorimetric determination of biological components and the compositions
INVENTOR(S): Gorai, Takashi; Hayashi, Tsukasa; Yamamoto,

Shigekazu; Matsumoto, Katsumi
PATENT ASSIGNEE(S): Kainosu K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09224697	A2	19970902	JP 1996-35030	19960222

PRIORITY APPLN. INFO.: JP 1996-35030 19960222

AB In the determination of biol. components by enzymically converting the analytes into H2O2 which is determined by colorimetry in the presence of peroxidase, the reaction is performed in the presence of ferrocyanides and SR (I; S = polysaccharide residue; R = C2-20 linear or branched alkyl, triterpene or steroid aglycon) as nonionic surfactants to prevent interference with bilirubin, etc. The compns. contain enzymes which act on the analytes to generate H2O2, peroxidase, color-forming reagents, ferrocyanides, and I. A pooled serum containing ditaurobilirubin was incubated with a reagent 1 containing 2-hydroxy-3-morpholinopropanesulfonic acid, -methyl-N-(hydroxy-3-sulfopropyl)-m-anisidine, ascorbate oxidase, and dodecyl β-D-maltoside (I) at 37° for 5 min, then with a reagent 2 containing N-2-hydroxyethylpiperazine-2-ethanesulfonic acid, 4-aminoantipyrine, NaN3, K ferrocyanide, cholesterol oxidase, and peroxidase at 37° for 5 min, and the reaction mixture was subjected to colorimetry. Determination error due to ditaurobilirubin was significantly reduced by addition of I.

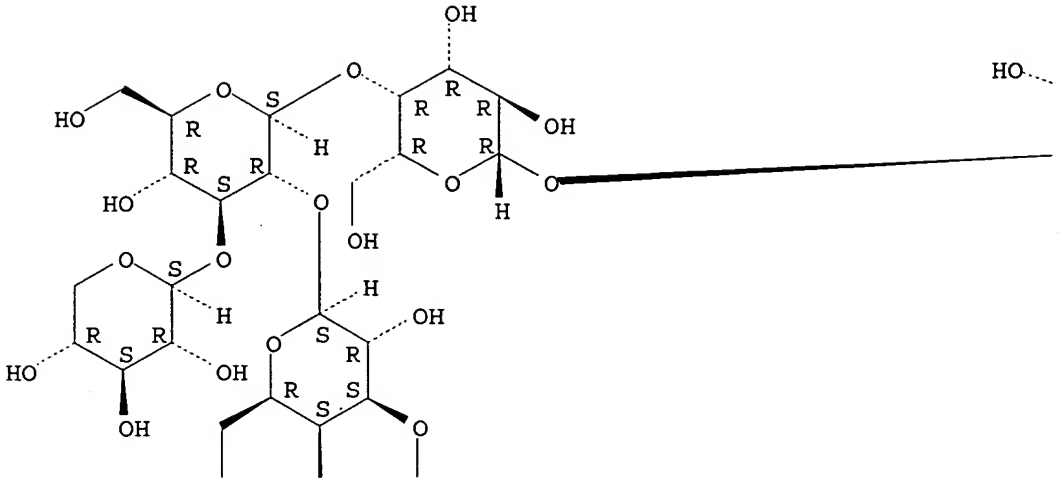
IT **11024-24-1**, Digitonin
(colorimetric determination of biol. components in serum using compns. containing ferrocyanides and nonionic surfactants to prevent bilirubin interference)

RN 11024-24-1 HCAPLUS

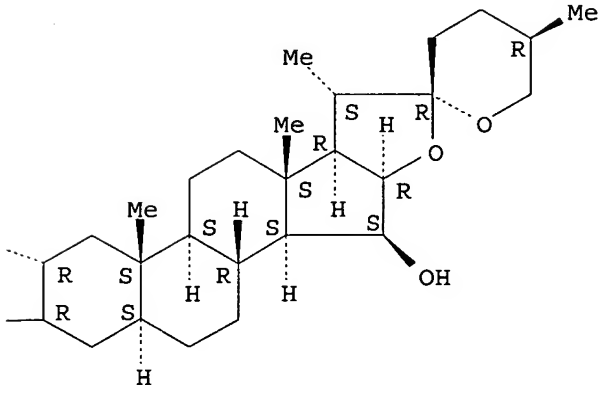
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

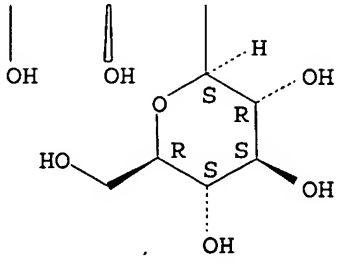
PAGE 1-A



PAGE 1-B



PAGE 2-A

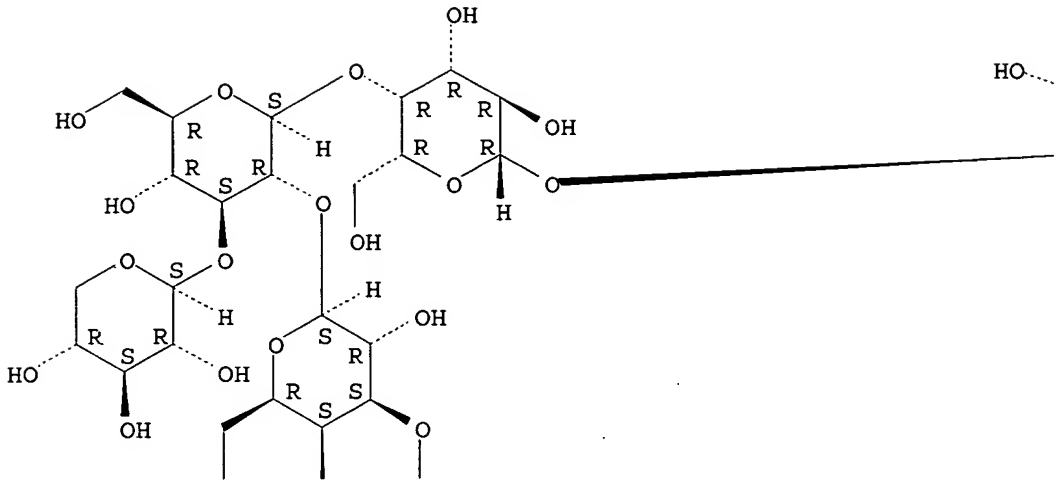


IC ICM C12Q001-28
CC 9-5 (Biochemical Methods)
Section cross-reference(s): 14
IT **11024-24-1**, Digitonin 13943-58-3, Potassium ferrocyanide 25339-99-5, Sucrose monolaurate 69227-93-6, Dodecyl β-D-maltoside
(colorimetric determination of biol. components in serum using compns. containing ferrocyanides and nonionic surfactants to prevent bilirubin interference)

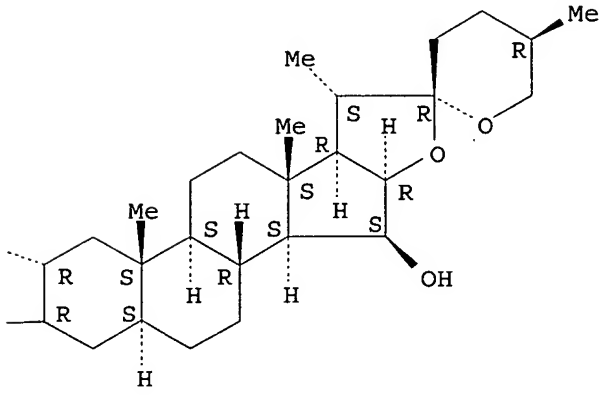
L28 ANSWER 38 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:548820 HCAPLUS
DOCUMENT NUMBER: 127:214770
TITLE: Digitonin enhances the efficacy of carboplatin in liver tumor after intra-arterial administration
AUTHOR(S): Lindner, Per G.; Heath, Dennis; Howell, Stephen B.; Naredi, Peter L.; Hafstrom, Larsolof R.
CORPORATE SOURCE: Sahlgrenska Hospital, University Goteborg, Goeteborg, S-41345, Swed.
SOURCE: Cancer Chemotherapy and Pharmacology (1997), 40(5), 444-448
CODEN: CCPHDZ; ISSN: 0344-5704
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Platinum-containing drugs enter the cell slowly and have a poor tissue penetration. Increasing the permeability of the cell membrane might increase the intracellular drug concentration Digitonin, a detergent that increases cell permeability by binding to cholesterol mols. in the cell membrane, can increase cisplatin accumulation and reduce tumor growth in vitro. It was determined whether digitonin could increase the efficacy of carboplatin (CBDCA) in vivo. In LH rats, a hepatoma was implanted in the liver. At 7 days after implantation, digitonin was infused via the hepatic artery and, 10 min later, CBDCA was injected. Biopsies from the tumor and liver parenchyma were obtained after 1 h. The concentration of Pt measured in the liver tumors was higher in the digitonin group than in the control groups. In the liver parenchyma the concns. the same. Measured with the 133Xe-clearance technique, digitonin did not alter the tumor blood flow. Digitonin enhanced the tumor-growth-retarding effect of CBDCA given intra-arterially at 5 mg/kg but not at 25 mg/kg. No increase in toxicity was observed for digitonin given together with CBDCA at 5 mg/kg. Systemic administration of CBDCA was not influenced by digitonin. These findings demonstrate that pretreatment with digitonin increases the tumor uptake of CBDCA and potentiates the cytotoxic effect of CBDCA.
IT **11024-24-1**, Digitonin
(digitonin enhances the uptake of carboplatin in liver tumor)
RN 11024-24-1 HCAPLUS
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

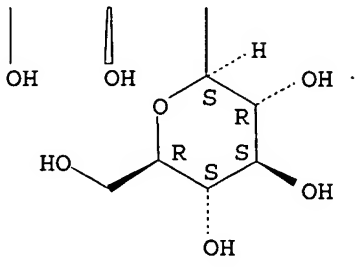
PAGE 1-A



PAGE 1-B



PAGE 2-A

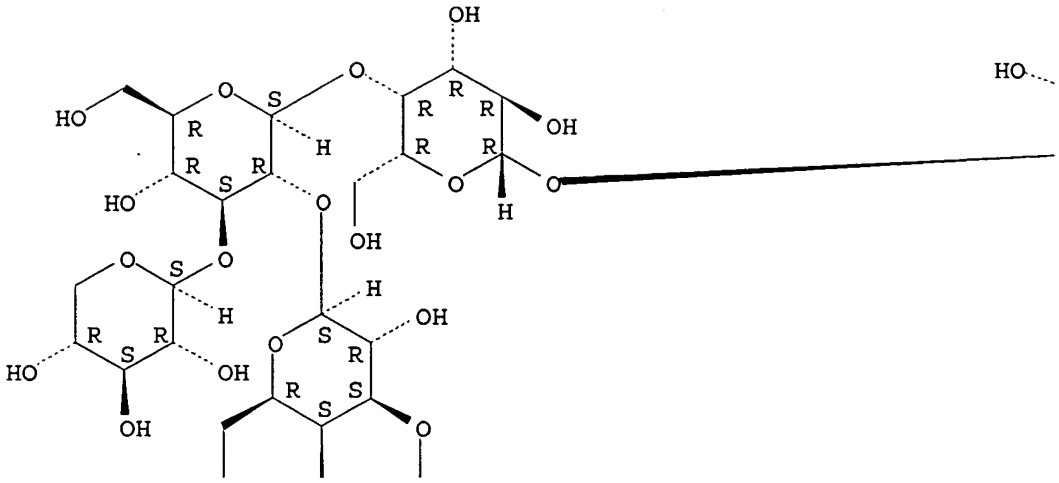


CC 1-6 (Pharmacology)
IT **11024-24-1**, Digitonin
(digitonin enhances the uptake of carboplatin in liver tumor)

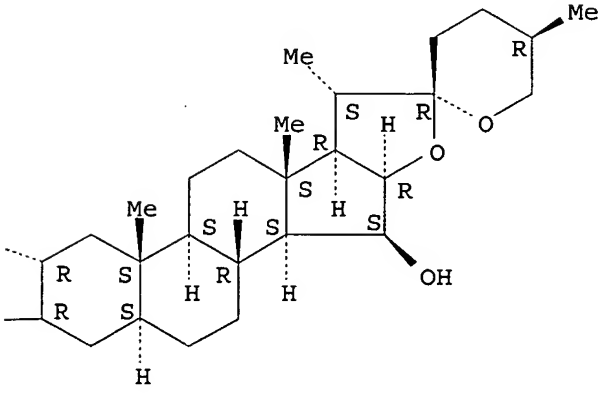
L28 ANSWER 39 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:349624 HCAPLUS
DOCUMENT NUMBER: 127:44662
TITLE: Involvement of a peripheral mechanism in the emesis induced by cardiac glycosides in Suncus murinus
AUTHOR(S): Kakimoto, Shuichiro; Saito, Hiroshi; Matsuki, Norio
CORPORATE SOURCE: Department of Chemical Pharmacology, Faculty of Pharmaceutical Science, The University of Tokyo, Hongo, 113, Japan
SOURCE: Biological & Pharmaceutical Bulletin (1997), 20(5), 486-489
CODEN: BPBLEO; ISSN: 0918-6158
PUBLISHER: Pharmaceutical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The ability of three cardiac glycosides, ouabain, digitonin and digitoxin, to induce emesis and their mechanism(s) of action were investigated in Suncus murinus. The i.p. injection of ouabain but not digitonin nor digitoxin caused vomiting in a dose-dependent manner. However, the administration of ouabain into the cerebroventricle did not cause emesis. Ouabain-induced emesis was partly prevented by surgical abdominal vagotomy. Pretreatment with tropisetron, a selective 5-HT3 (5-hydroxytryptamine) receptor antagonist, did not affect the emetic response evoked by ouabain. These results suggest that ouabain exerts emetic effects via peripheral mechanisms(s), but 5-HT3 receptors are not involved in the pathway.
IT **11024-24-1**, Digitonin
(involvement of a peripheral and absence of 5-HT3 mechanisms in emesis induced by cardiac glycosides in Suncus murinus)
RN 11024-24-1 HCAPLUS
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



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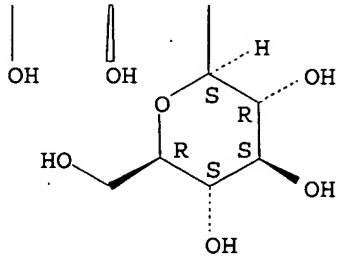
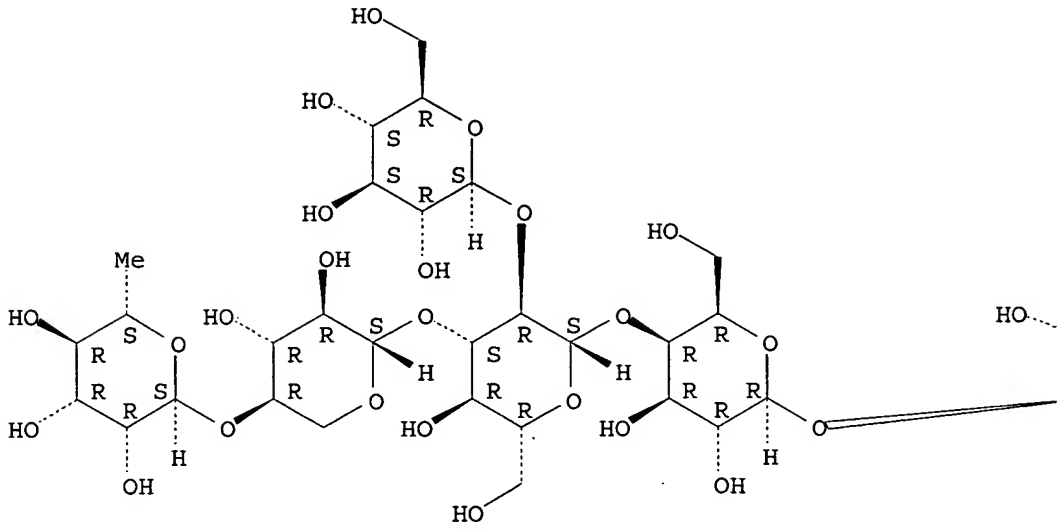


CC 1-8 (Pharmacology)
IT 71-63-6, Digitoxin 630-60-4, Ouabain **11024-24-1**, Digitonin
(involvement of a peripheral and absence of 5-HT3 mechanisms in emesis induced by cardiac glycosides in Suncus murinus)
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 40 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:68400 HCAPLUS
DOCUMENT NUMBER: 126:183755
TITLE: Steroidal glycosides from the underground parts of Hosta plantaginea var. japonica and their cytostatic activity on leukemia HL-60 cells
AUTHOR(S): Mimaki, Yoshihiro; Kameyama, Aiko; Kuroda, Minpei; Sashida, Yutaka; Hirano, Toshijiko; Oka, Kitaro; Koike, Kazuo; Nikaido, Tamotsu
CORPORATE SOURCE: Sch. Pharmacy, Tokyo Univ. Pharmacy Life Sci., Tokyo, 192-03, Japan
SOURCE: Phytochemistry (1996), Volume Date 1997, 44(2), 305-310
CODEN: PYTCAS; ISSN: 0031-9422
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A new C22-steroid glycoside was isolated from the underground parts of Hosta plantaginea var. japonica, together with a known furostanol saponin and three known spirostanol saponins. The structure of the new steroid glycoside was characterized by spectroscopic anal. and acid-catalyzed hydrolysis as 2α,3β,16β-trihydroxy-5α-pregn-20(21)-ene-carboxylic acid γ-lactone 3-O-{O-β-D-glucopyranosyl-(1→2)-O-β-D-glucopyranosyl-(1→4)-β-D-galactopyranoside}. The isolated compds. were assayed for their cytostatic activity on leukemia HL-60 cells. The spirostanol saponins showed cytostatic activity in a dose-dependent manner with the IC50 values ranging between 1 and 3 μg ml-1.
IT **119483-75-9P**
(steroidal glycosides from the underground parts of Hosta plantaginea var. japonica and their cytostatic activity on leukemia HL-60 cells)
RN 119483-75-9 HCAPLUS
CN β-D-Galactopyranoside, (2α,3β,5α,25R)-2-hydroxyspirostan-3-yl O-6-deoxy-α-L-mannopyranosyl-(1→4)-O-β-D-xylopyranosyl-(1→3)-O-[β-D-glucopyranosyl-(1→2)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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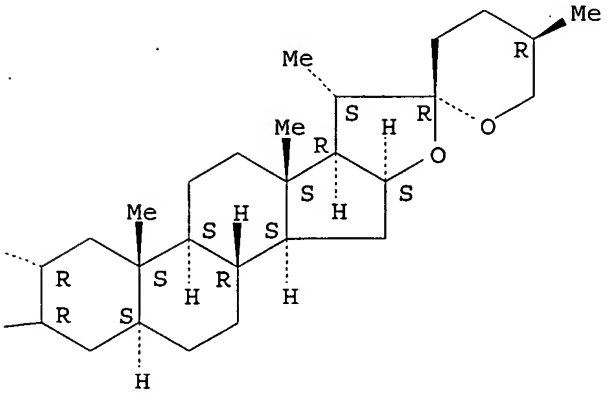


CC 11-1 (Plant Biochemistry)
Section cross-reference(s): 1, 30, 33
IT 28591-01-7P **119483-75-9P** 160067-93-6P 186901-40-6P
186960-65-6P
(steroidal glycosides from the underground parts of Hosta plantaginea var. japonica and their cytostatic activity on leukemia HL-60 cells)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 41 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:595231 HCAPLUS
DOCUMENT NUMBER: 126:176759

TITLE: Evaluation of ocular permeation enhancers: in vitro effects on corneal transport of four β-blockers, and in vitro/in vivo toxic activity

AUTHOR(S): Fabrizio Saettone, M.; Chetoni, Patrizia; Cerbai, Riccardo; Mazzanti, Gabriela; Braghiroli, Laura

CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Pisa, Via Bonanno 33, Pisa, 56126, Italy

SOURCE: International Journal of Pharmaceutics (1996), 142(1), 103-113
CODEN: IJPHDE; ISSN: 0378-5173

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The efficacy and toxicity of a series of prospective ocular penetration enhancers (benzalkonium chloride, EDTA, nonionic surfactants, surface-active heteroglycosides and bile salts) was investigated in vitro, using isolated rabbit corneas. As test drugs 4 β-blocking agents were used, chosen in order of increasing lipophilicity: atenolol (AT), timolol (TM), levobunolol (LB) and betaxolol (BX). The increased corneal hydration induced by the enhancers was taken as an index of cellular and tissue damage; the ocular irritancy of the agents was also tested in rabbits in vivo. In the absence of enhancers, the apparent corneal permeability coeffs. of the 4 drugs were in the order AT.simeq.TM <LB ≥BX; in general, the enhancers increased the permeation rates of the more hydrophilic drugs, AT and TM, more than those of the other 2, more lipophilic ones, LB and BX. The study pointed to some agents (in particular, polyoxyethylene alkyl ethers and bile salts) as effective and safe penetration promoters for AT and TM. Their apparent safety at the tested concns. was confirmed by their failure to increase the corneal hydration level beyond the 'normal' value, and by their lack of irritant effect in vivo, as evidenced by a Draize test.

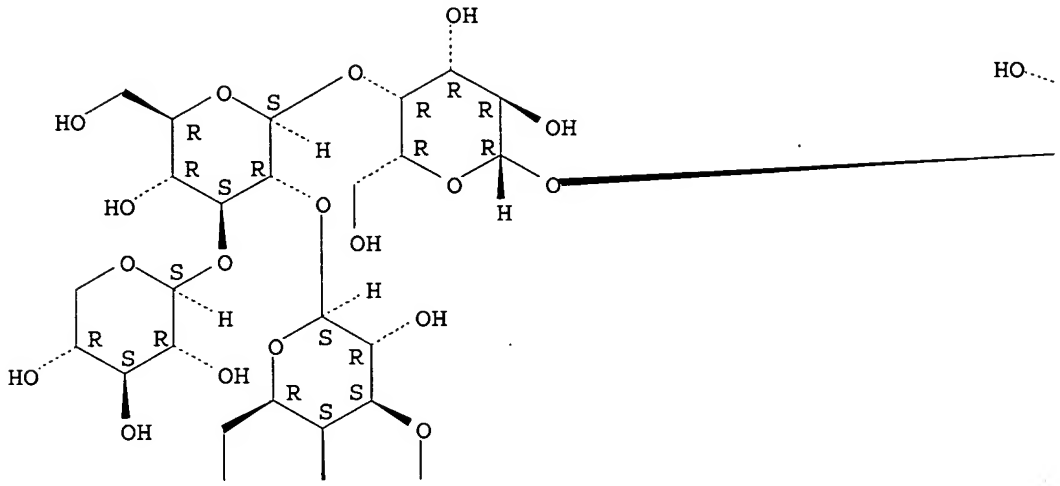
IT **11024-24-1**, Digitonin
(ocular permeation enhancers effects on corneal transport of β-blockers)

RN 11024-24-1 HCAPLUS

CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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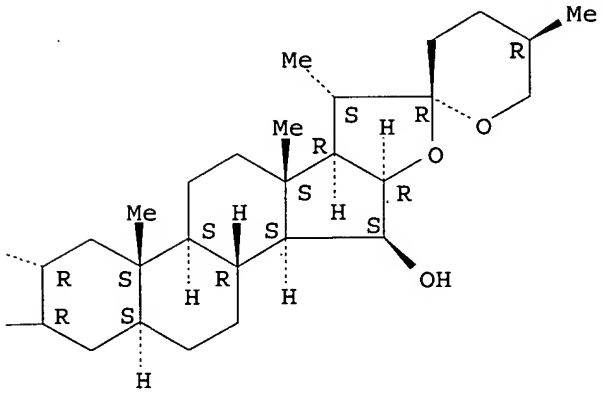
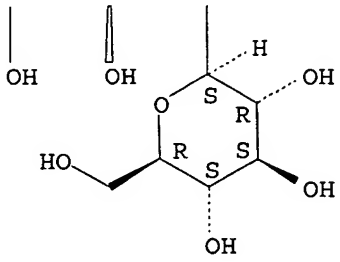


PAGE 2-A

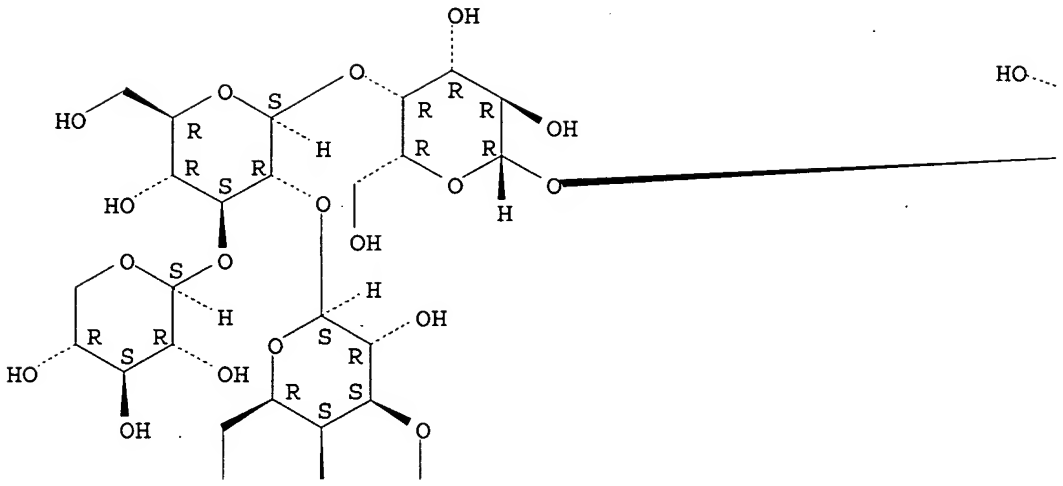


CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 1
IT 70-18-8, Reduced glutathione, biological studies 139-33-3, Disodium EDTA 302-95-4, Sodium deoxycholate 1180-95-6, Sodium taurodeoxycholate 2898-95-5, Sodium ursodeoxycholate 6805-41-0, Escin 9002-92-0, Brij 35 9004-98-2, Brij 98 9005-00-9, Brij 78 **11024-24-1**, Digitonin 26921-17-5, Timolol maleate 27912-14-7, Levobunolol hydrochloride 29122-68-7, Atenolol 63659-19-8, Betaxolol hydrochloride
(ocular permeation enhancers effects on corneal transport of β-blockers)

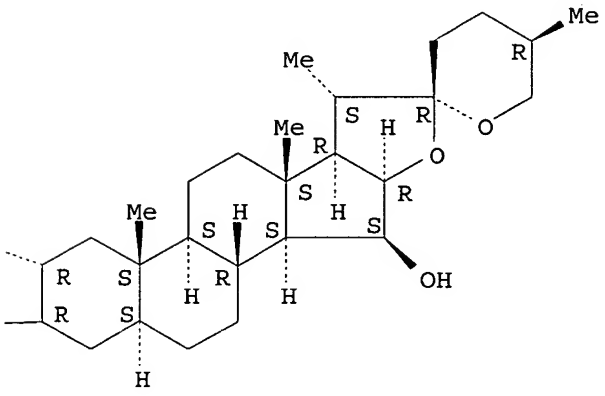
L28 ANSWER 42 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:695743 HCAPLUS
DOCUMENT NUMBER: 121:295743
TITLE: In vitro inhibition of adenosine deaminase by a group of steroid and triterpenoid compounds
AUTHOR(S): Koch, Heinrich P.; Aichinger, Andrea; Bohne, Bernd; Plank, Gerlinde
CORPORATE SOURCE: Inst. Pharm. Chem., Univ. Vienna, Vienna, A-1090, Austria
SOURCE: Phytotherapy Research (1994), 8(2), 109-11
CODEN: PHYREH; ISSN: 0951-418X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effects of several sapogenins and saponins of the steroid and triterpenoid classes, as well as of a few common phytosterols, have been tested for their inhibitory action towards adenosine deaminase (ADA). It was found that the acidic sapogenins strongly inhibit the enzyme. The mean inhibitory concentration (IC50) was in the range 10-3 to 10-2 mg/mL, while the inhibitor consts. (Ki) have been estimated as about 10-6M. In contrast to this finding is the complete absence of any influence on the enzyme of the neutral sapo(ge)nins and the phytosterols. It is suggested that ADA is a worthwhile therapeutic target and that the (acidic) sapogenins, which are regular constituents of many medicinal plant species, presumably contribute their activity through an interaction with this enzyme.
IT **11024-24-1**, Digitonin
(in vitro inhibition of adenosine deaminase by group of steroid and triterpenoid compds.)
RN 11024-24-1 HCAPLUS
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

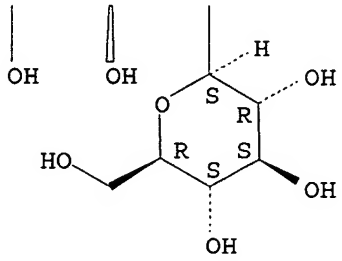
PAGE 1-A



PAGE 1-B



PAGE 2-A

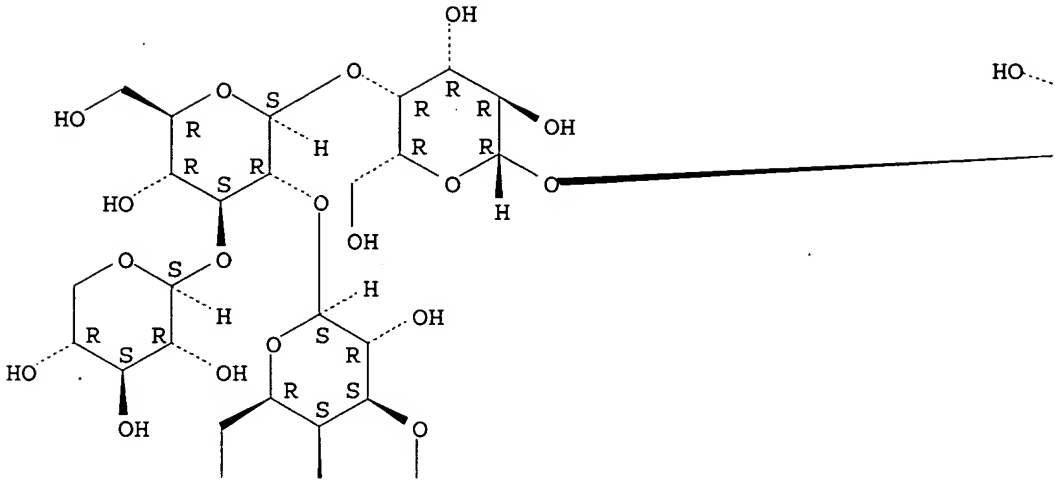


CC 7-3 (Enzymes)
Section cross-reference(s): 1, 11, 30, 32
IT 57-87-4, Ergosterol 77-52-1, Ursolic acid 83-46-5, β-Sitosterol 83-48-7, Stigmasterol 471-53-4, Glycyrrhetic acid 474-58-8, β-Sitosterol-β-D-glucoside 474-62-4, Campesterol 508-02-1, Oleanolic acid 512-04-9, Diosgenin 559-70-6, β-Amyrin **11024-24-1**, Digitonin 11072-93-8, β-Aescin
(in vitro inhibition of adenosine deaminase by group of steroid and triterpenoid compds.)

L28 ANSWER 43 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1989:624923 HCAPLUS
DOCUMENT NUMBER: 111:224923
TITLE: Effects of various chemical compounds on Ehrlich ascites tumor cells in a maintenance medium
AUTHOR(S): Takamura, Shozo; Yoshida, Junko; Suzuki, Shiro
CORPORATE SOURCE: Dep. Pharmacol., Kanazawa Med. Univ., Uchinada, 920-02, Japan
SOURCE: Kanazawa Ika Daigaku Zasshi (1989), 14(2), 241-5
CODEN: KIDZDN; ISSN: 0385-5759
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effects of 71 natural and synthetic chemical compds. on Ehrlich ascites tumor cells in a maintenance medium were examined Nine thiols and related compds. promoted the cell growth. Fifteen potent cytotoxic compds. were tested at lower concns. against the same cells. Two of these compds., diethyldithiocarbamate and menadione, showed a marked cell-killing effect. Their mechanisms of cytotoxic action are discussed.
IT **11024-24-1**, Digitonin
(neoplasm inhibition by)
RN 11024-24-1 HCAPLUS
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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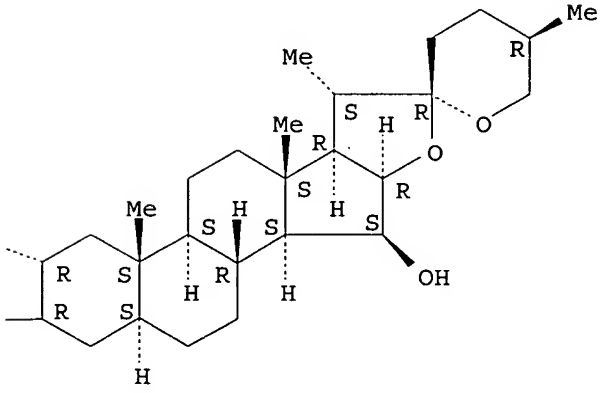
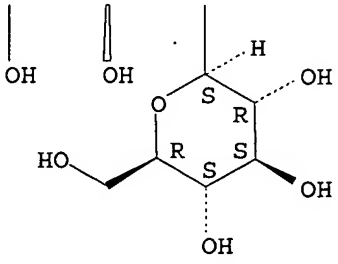


PAGE 2-A



CC 1-6 (Pharmacology)
IT 50-53-3, Chlorpromazine, biological studies 50-67-9, Serotonin, biological studies 50-81-7, L-Ascorbic acid, biological studies 51-41-2, Noradrenaline 51-61-6, Dopamine, biological studies 52-53-9, Verapamil 52-67-5, D-Penicillamine 52-90-4, L-Cysteine, biological studies 53-57-6, NADPH 53-59-8, NADP 53-84-9, NAD 54-85-3, Isoniazid 54-92-2, Iproniazid 56-10-0 56-65-5, 5'-ATP, biological studies 58-27-5, Menadione 58-61-7, Adenosine, biological studies 58-68-4, NADH 58-97-9, 5'-Uridylic acid, biological studies 60-23-1, Cysteamine 60-24-2, 2-Mercaptoethanol 60-32-2 60-56-0, Methimazole 66-40-0, Tetraethylammonium 66-71-7, 1,10-Phenanthroline 70-18-8, biological studies 70-49-5, Thiomalic acid 78-98-8, Methylglyoxal 85-61-0, Coenzyme A, biological studies 86-01-1, GTP 86-54-4, Hydralazine 100-63-0, Phenylhydrazine 108-02-1 120-73-0D, Purine, derivs. 124-20-9, Spermidine 135-52-4, Zincon 147-84-2, biological studies 147-93-3, Thiosalicylic acid 149-30-4, 2-Mercaptobenzothiazole 155-09-9, Tranylcypromine 288-32-4, Imidazole, biological studies 289-95-2D, Pyrimidine, derivs. 362-74-3, Dibutyryl-cAMP 367-51-1, Sodium thioglycolate 444-27-9, 4-Thiazolidinecarboxylic acid 454-29-5, DL-Homocysteine 535-34-2, DL-Cystathionine 1197-18-8, Tranexamic acid 3483-12-3, Dithiothreitol 3858-83-1, p-Aminobenzamidine 7101-51-1, L-Dopa methyl ester 7440-50-8D, Copper, compds. 7758-98-7, Copper sulfate, biological studies 9001-90-5, Plasmin 9001-91-6, Plasminogen 9002-04-4, Thrombin 9002-07-7, Trypsin 9004-07-3, α-Chymotrypsin 9005-49-6, Heparin, biological studies 9031-37-2, Ceruloplasmin 9035-81-8, Trypsin inhibitor 9036-06-0, Pronase 9042-14-2, Dextran sulfate 10102-18-8, Sodium selenite **11024-24-1**, Digitonin 11028-71-0, Concanavalin A 14769-73-4 15658-35-2, 6,6'-Dithiodinicotinic acid 27025-41-8 29908-03-0, S-Adenosylmethionine 32266-35-6, Dibutyryl-cGMP 73348-75-1 82138-69-0
(neoplasm inhibition by)

L28 ANSWER 44 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1986:572980 HCAPLUS
DOCUMENT NUMBER: 105:172980
TITLE: Tigogenin glycosides for treatment of hypercholesterolemia
INVENTOR(S): Malinow, M. Rene
PATENT ASSIGNEE(S): Medical Research Foundation of Oregon, USA
SOURCE: U.S., 7 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4602003	A	19860722	US 1982-379098	19820517
US 4602005	A	19860722	US 1984-602298	19840420

PRIORITY APPLN. INFO.: US 1982-379098 A2
1982
0517

AB Tigogenin glycosides reduced digestive absorption of cholesterol. Thus, tigogenin was treated with glucose pentaacetate to give glucose-tigogenin. Similarly prepared were glucose-diosgenin and cellobiose-tigogenin which also showed activity.

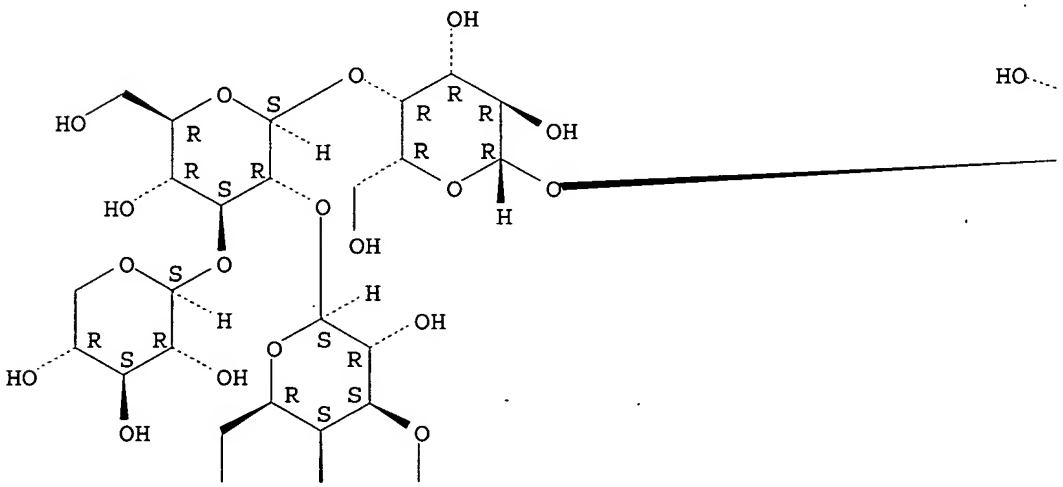
IT **11024-24-1**
(anticholesteremic activity of)

RN 11024-24-1 HCAPLUS

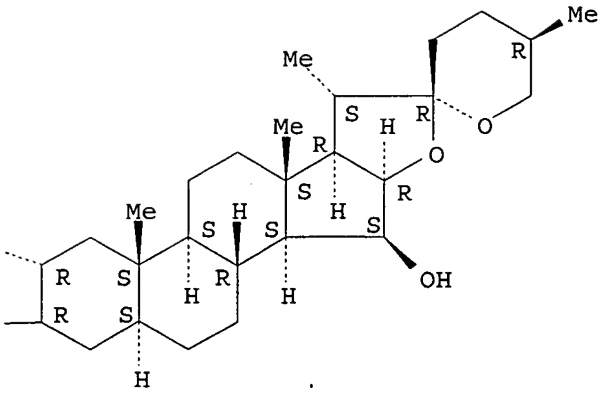
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25 R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

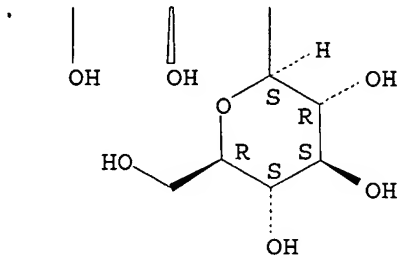
PAGE 1-A



PAGE 1-B



PAGE 2-A



IC ICM A01N031-00
ICS A61K031-705; A61K031-58; A61K031-56
INCL 514026000
CC 33-3 (Carbohydrates)
Section cross-reference(s): 1
IT 7073-61-2 **11024-24-1** 104732-64-1 104732-65-2
104732-66-3
(anticholesteremic activity of)

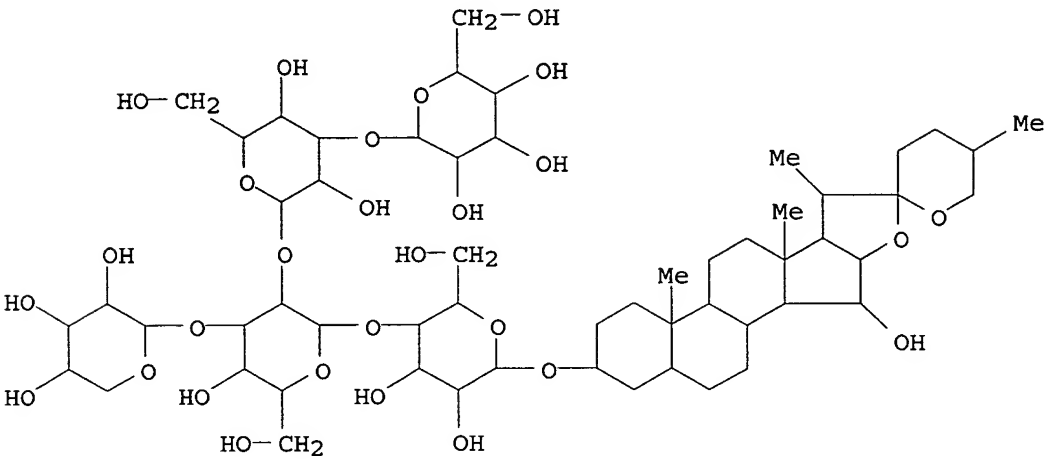
L28 ANSWER 45 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1984:203116 HCAPLUS
DOCUMENT NUMBER: 100:203116
TITLE: Structure-antitumor activity relations in a series of steroidal glycosides
AUTHOR(S): Bersuker, I. B.; Dimoglo, A. S.; Choban, I. N.; Lazur'evskii, G. V.; Kintya, P. K.
CORPORATE SOURCE: Inst. Khim., Kishinev, USSR
SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1983), 17(12), 1467-71
CODEN: KHFZAN; ISSN: 0023-1134
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Computer anal. of mol. structure-neoplasm-inhibitory relations of 70 title compds. for which the degree of biol. activity is known showed that active compds. are characterized by branched glycosidal chains with ≥4 sugars, with the 1st sugar attached to C3 of the genin moiety being galactose, followed by 2 glucoses and then either xylose or rhamnose. Spirostanols tended

to be more active than furostanols. The importance of Me-group orientation at C25 and other parameters are discussed. The method was very successful in predicting the antitumor activities of 12 other compds.

IT **89590-96-5**
(neoplasm-inhibiting activity of, structure in relation to)

RN 89590-96-5 HCAPLUS

CN β-D-Galactopyranoside, (3β,5α,15β,25R)-15-hydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)



CC 1-3 (Pharmacology)

IT 39941-51-0 40043-49-0 50773-42-7 53093-47-3 59015-81-5
61478-50-0 75557-22-1 89590-89-6 89590-90-9 89590-92-1
89590-96-5 89590-97-6
(neoplasm-inhibiting activity of, structure in relation to)

L28 ANSWER 46 OF 46 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1982:97468 HCAPLUS
DOCUMENT NUMBER: 96:97468
TITLE: Search for hypocholesteremic agents among a group of steroid glycosides
AUTHOR(S): Kintya, P. K.; Vasilenko, Yu. K.; Goryanu, G. M.; Bobeiko, V. A.; Suetina, I. V.; Mashchenko, N. E.
CORPORATE SOURCE: Inst. Khim., Kishinev, USSR
SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1981), 15(9), 55-60
CODEN: KHFZAN; ISSN: 0023-1134
DOCUMENT TYPE: Journal
LANGUAGE: Russian

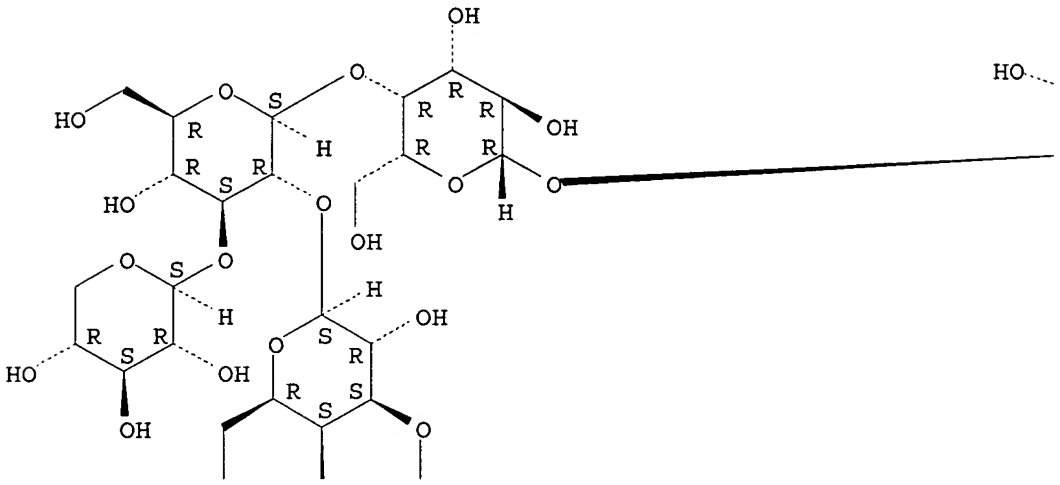
AB Among the 23 steroids and steroid glycosides tested, Agavoside C [58546-17-1] had the greatest hypocholesteremic effect and reduced blood cholesterol by 38.5% in hypercholesteremic rats. In contrast, a standard anticholesteremic agent, polysponin, reduced blood cholesterol by only 11%. Almost all the compds. tested showed some activity and may comprise a class of natural compds. able to reduce blood cholesterol.

IT **11024-24-1 58546-19-3**

(anticholesteremic activity of)
RN 11024-24-1 HCAPLUS
CN β-D-Galactopyranoside, (2α,3β,5α,15β,25R)-2,15-dihydroxyspirostan-3-yl O-β-D-glucopyranosyl-(1→3)-O-β-D-galactopyranosyl-(1→2)-O-[β-D-xylopyranosyl-(1→3)]-O-β-D-glucopyranosyl-(1→4)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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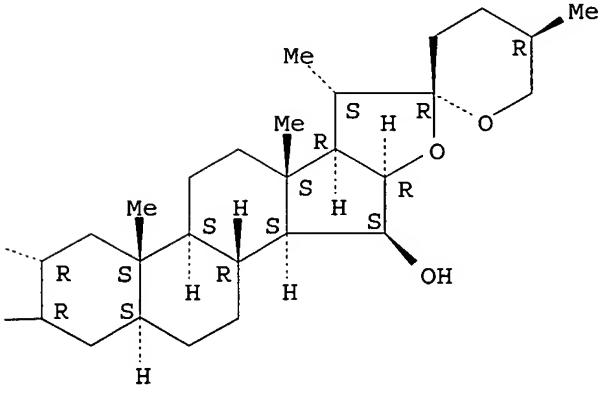
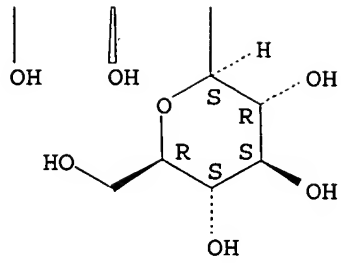
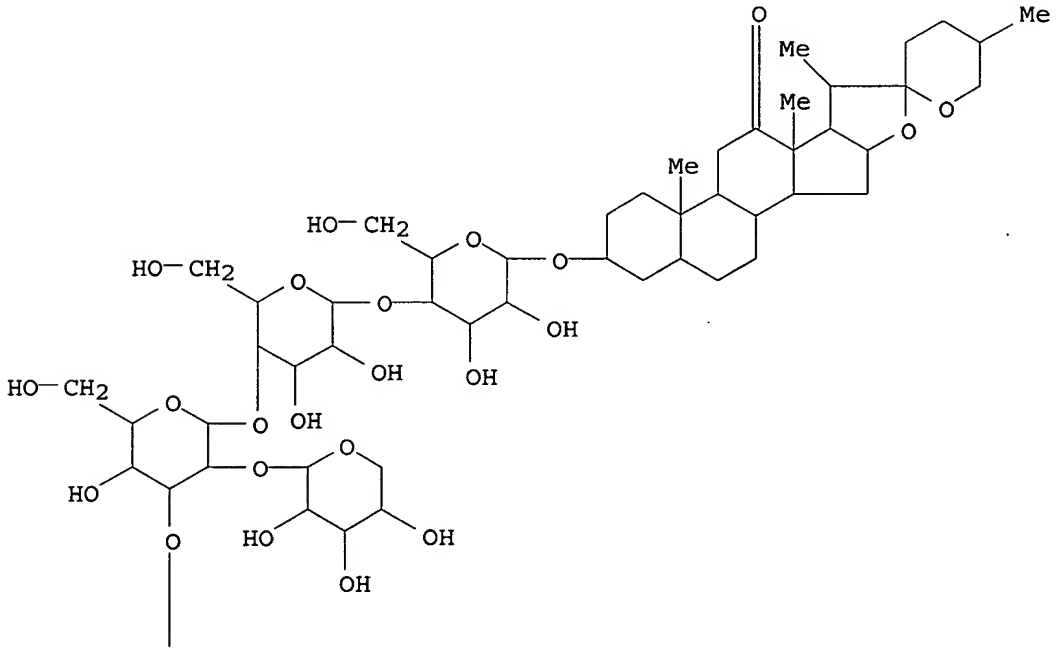


PAGE 2-A



RN 58546-19-3 HCAPLUS
CN Spirostan-12-one, 3-[(O-6-deoxy-α-L-mannopyranosyl-(1→4)-O-6-deoxy-α-L-mannopyranosyl-(1→3)-O-[β-D-xylopyranosyl-(1→2)]-O-β-D-glucopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→4)-β-D-galactopyranosyl)oxy]-, (3β,5α,25R)- (9CI) (CA INDEX NAME)

PAGE 1-A



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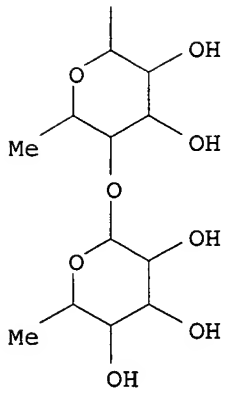

CC 1-10 (Pharmacology)

IT 126-19-2 467-55-0 511-96-6 512-04-9 **11024-24-1**
14144-06-0 16653-52-4 19057-60-4 19057-68-2 28591-01-7
54191-26-3 56857-65-9 56857-66-0 58546-17-1
58546-19-3 60267-23-4 60267-24-5 60267-28-9
60454-80-0 60454-83-3 70855-43-5 75556-25-1 80234-43-1
(anticholesteremic activity of)